

Planning Board Presentation  
White Oak Science Gateway  
Master Plan  
Preliminary Recommendations  
September 20, 2012

<http://montgomeryplanning.org/community/wosg/index.shtm>

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# white oak science gateway master plan

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September 20 Presentation covered:

## **Area, Outreach, Schedule, Plan Development/Overview, Vision**

### **Overview of Areawide Preliminary Recommendations**

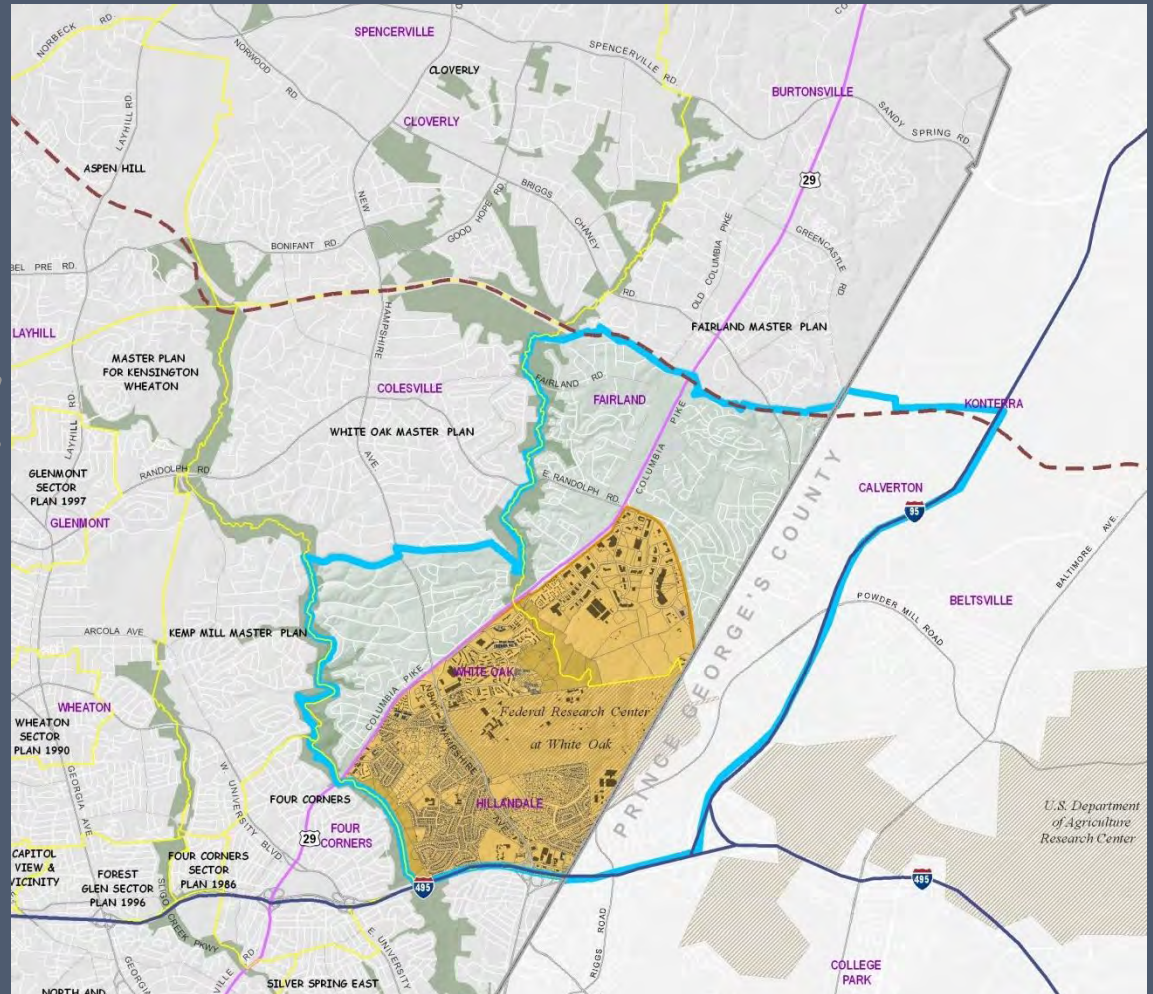
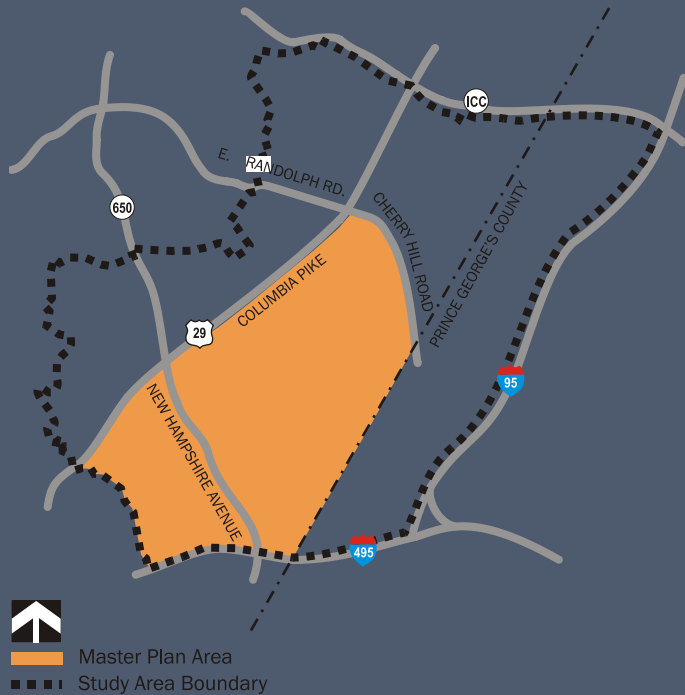
- Natural Environment
- Parks, Open Spaces, Recreation
- Mobility and Connectivity
- Historic Resources

### **Overview of Centers:**

- White Oak/FDA Center and Hillandale Community
  - Existing Conditions
  - Illustrative Concept
  - Environment
  - Parks and Open Space
  - Zoning Recommendations

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## Boundaries: Master Plan Area and Study Area



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## Master Plan Schedule

### MAJOR MASTER PLAN MILESTONES

- Scope of Work Approved February 2011
- Form CAC; Begin Meetings April 2011
- Prepare development scenarios January – February 2012
- Run traffic model; analyze results March – May 2012
- Hold CAC and Community Meetings 2011 - 2012
- Prepare Preliminary Plan Recommendations July – August 2012



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## Master Plan Community Outreach

- Citizens Advisory Committee (CAC)
- Attend Civic Association meetings
- Hold open houses for larger community
- Created questionnaire to solicit community input
- Inform community of meetings via e-mail contact list
- Post Plan progress and information on our website:

<http://montgomeryplanning.org/community/wosg/index.shtm>



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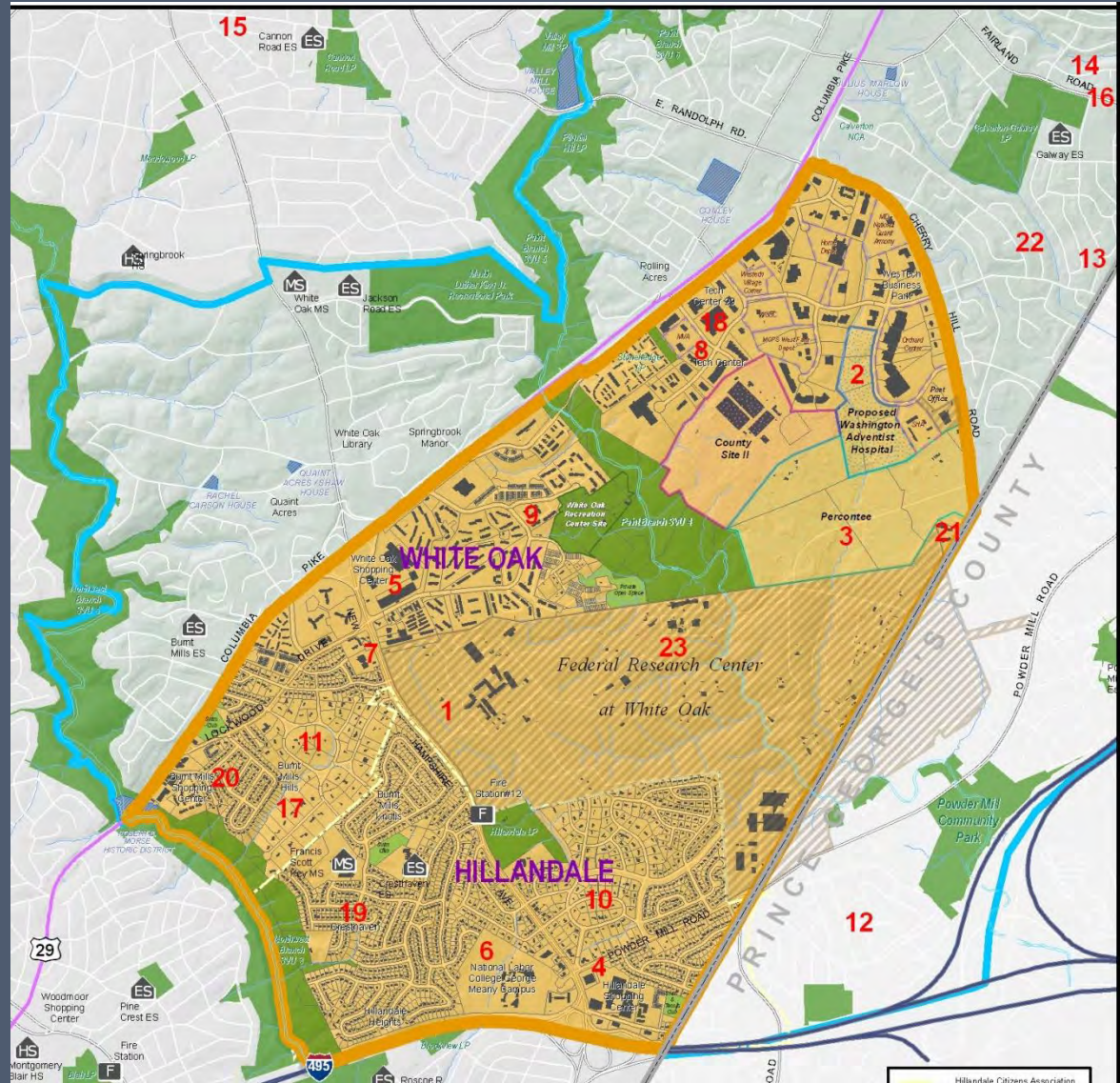
## Master Plan CAC Meetings and Community Forums

### CAC Meetings

- July 17, 2012
- June 19, 2012
- May 22, 2012
- April 24, 2012
- November 15, 2011
- October 18, 2011
- September 20, 2011
- July 19, 2011
- July 12, 2011
- June 14, 2011
- May 24, 2011
- April 26, 2011

### Community Forums

- June 26, 2012
- October 25, 2011
- June 28, 2011
- June 30, 2010



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## Master Plan Meetings

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May 31	Planning Board Briefing on Traffic Modeling
June 19	CAC Meeting on Preliminary Recommendations
June 26	Community Forum on Preliminary Recommendations
July 17	CAC Meeting on Preliminary Recommendations (transportation and staging)
<b>Sept. 20 &amp; 27, October 4</b>	<b>Staff Briefing to Planning Board on Preliminary Recommendations</b>

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## Upcoming Master Plan Schedule

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### 2012

**Sept. 20 & 27**      **Preliminary Recommendations to Planning Board**

November 29  
(tentative)      Staff Draft and Urban Design Guidelines Presented to the  
Planning Board; public hearing date requested

### 2013

January 17  
(tentative)      Planning Board Public Hearing

February-June      Planning Board Worksessions

July      Transmit Plan to County Council and County Executive

October      County Council Public Hearing

October-Dec.      PHED Committee and full Council Worksessions

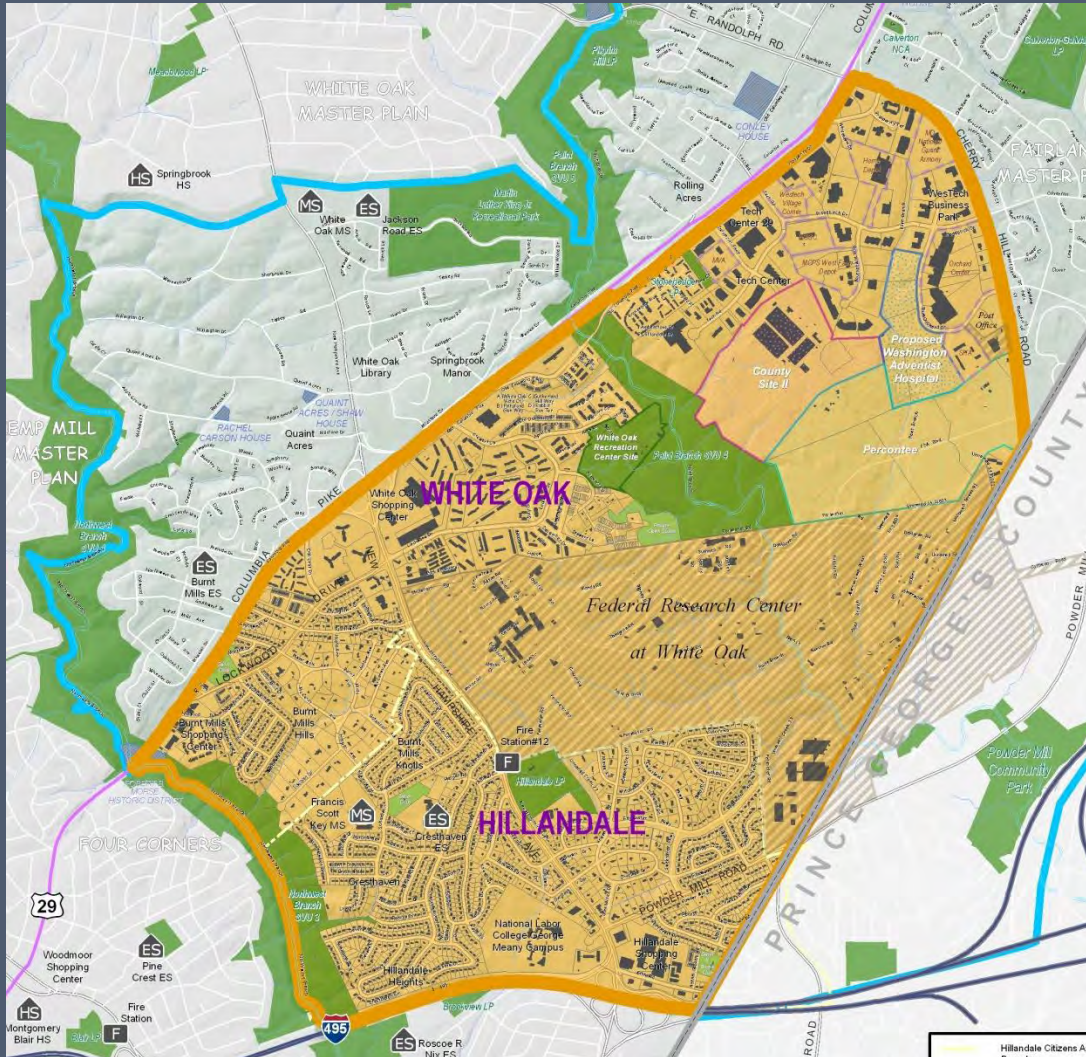
### 2014

Jan. - March      Sectional Map Amendment (Zoning Process)

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## Master Plans

WOSG Master Plan covers 3,000 acres



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## 1997 Master Plans



“One of the most important objectives in the **Fairland Master Plan** is to reshape the land use and zoning...consistent with the General Plan Refinement and to define Fairland as suburban and not within the area of influence of the I-95 corridor.” page 9



The 1997 **White Oak Master Plan** “envisions the area remaining residential in nature...the character and density...will not appreciably change.” page 13 The Plan supports the General Plan objective of concentrating future growth in the Urban Ring and I-270 Corridor.



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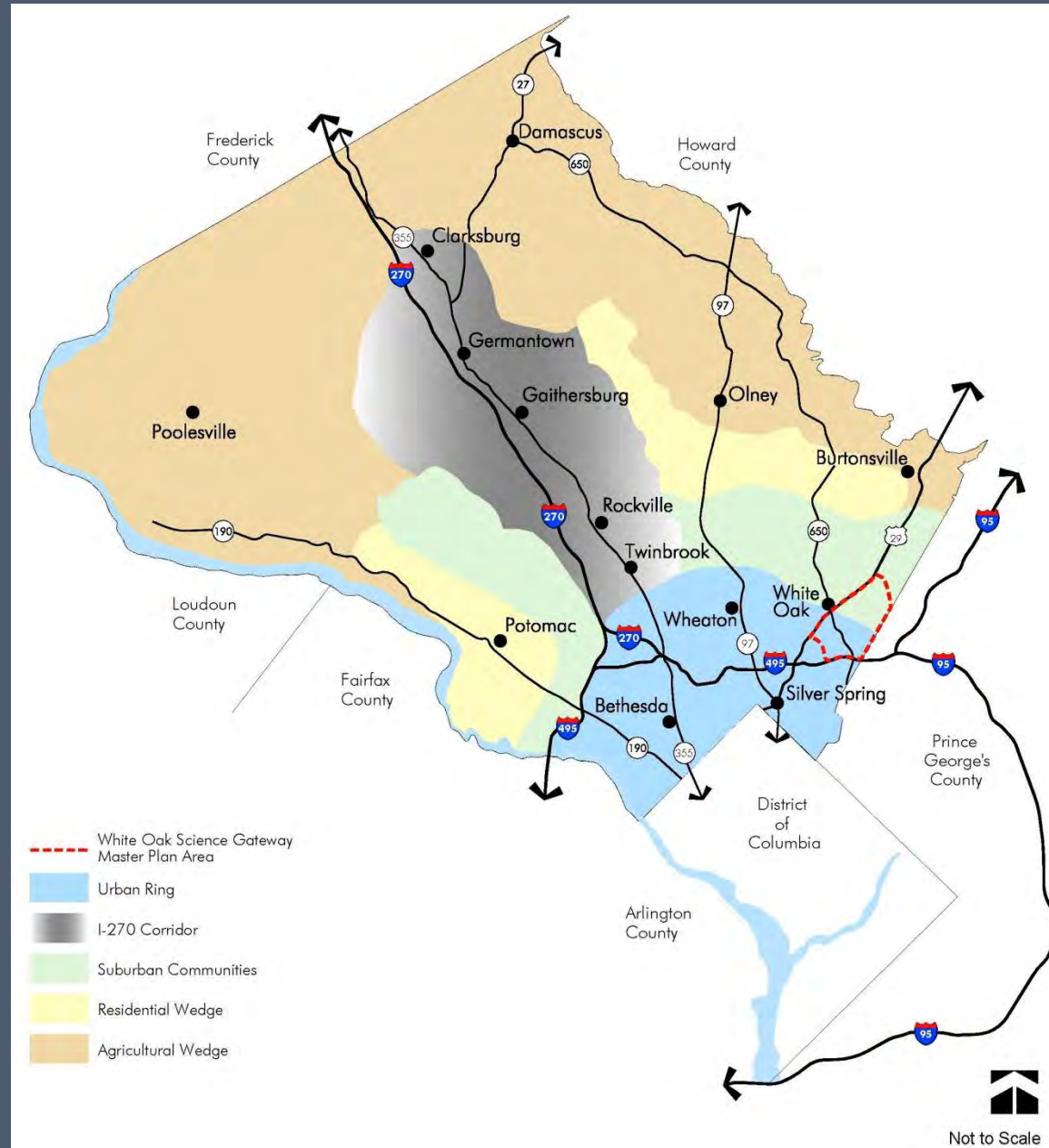
## General Plan

### Urban Ring:

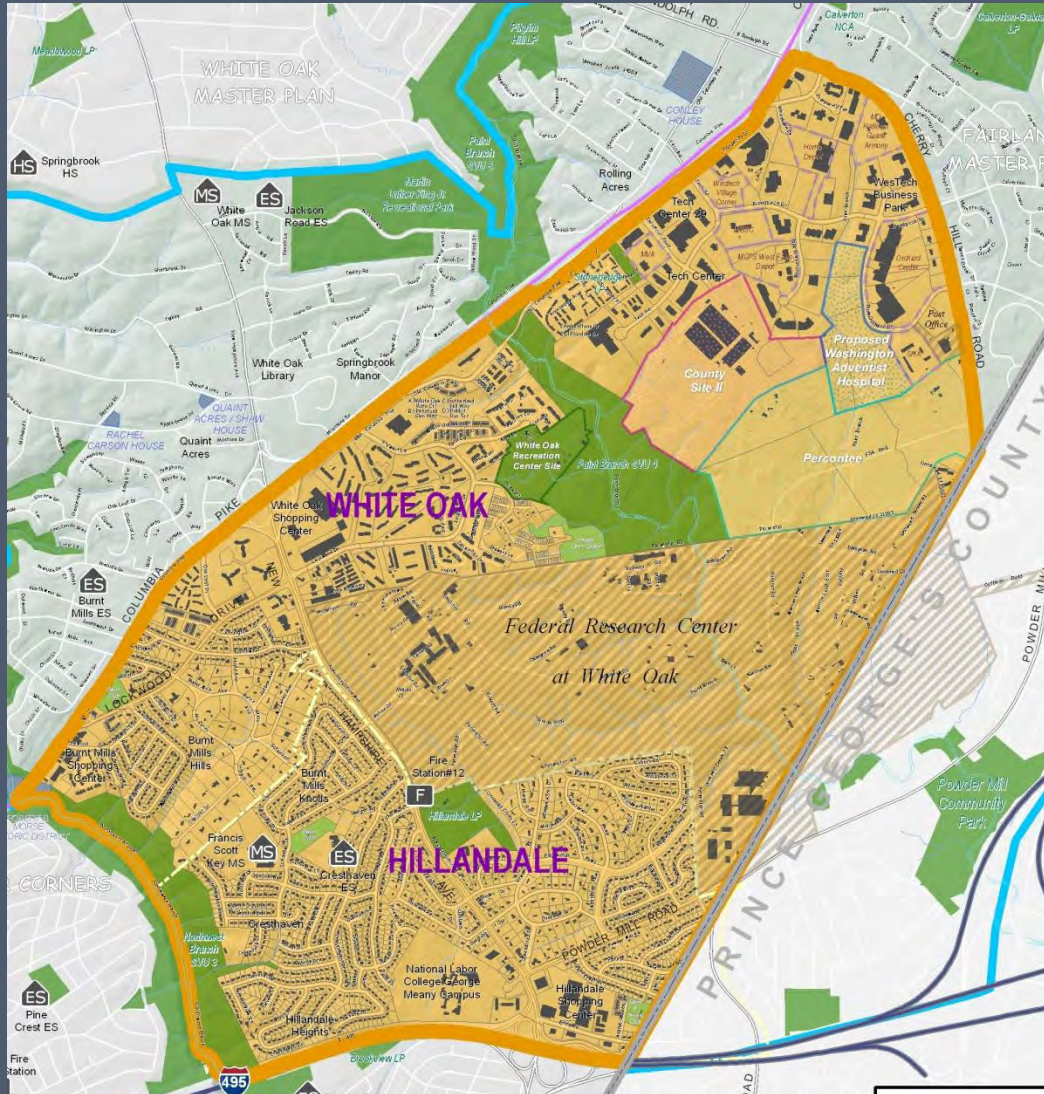
- Well-established, lively centers with jobs and housing
- Strong residential neighborhoods
- Varied transportation options
- Relatively dense development
- Active public & private reinvestment
- Commercial revitalization

### Suburban Communities:

- Moderate density, transit serviceable uses along major arteries
- Increasing transportation options
- Suburban residential neighborhoods
- Distinct centers
- Public and private investment



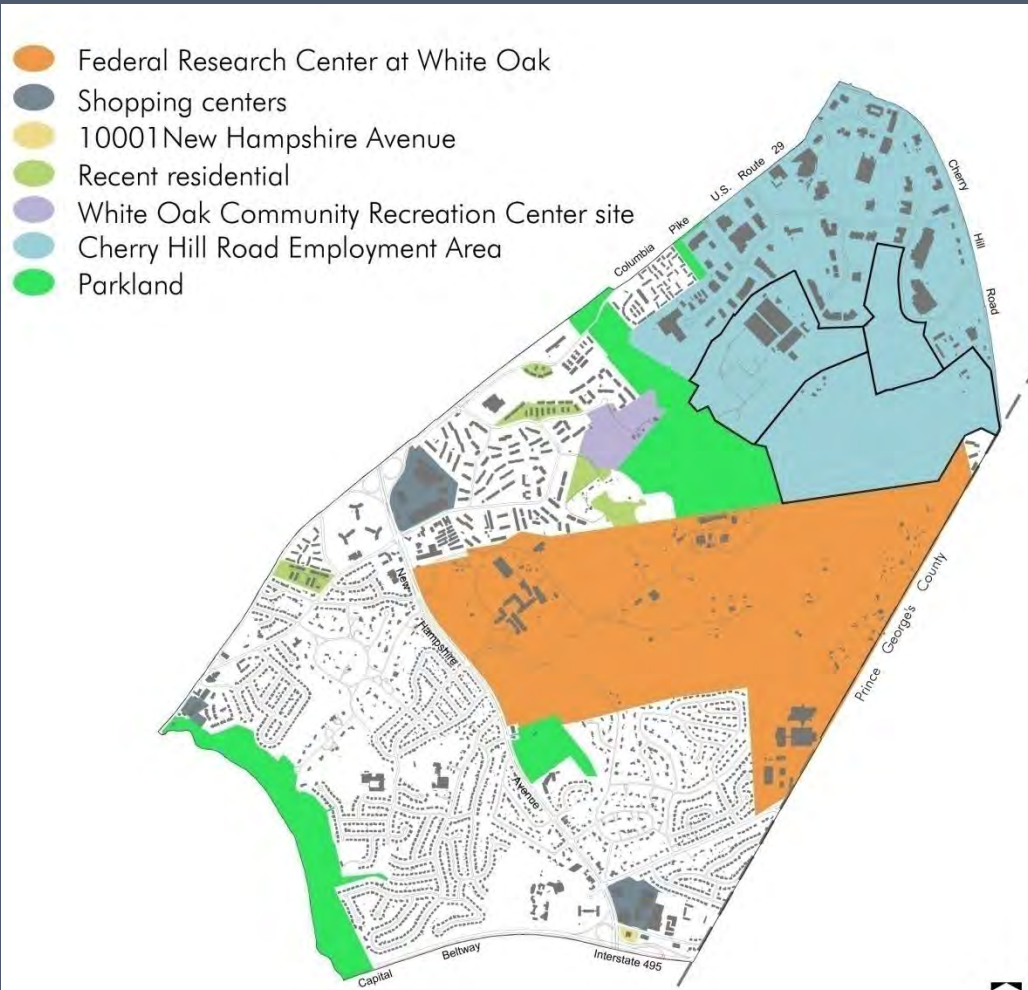
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Plan is addressing:

- Increased Employment Options
- Reinvestment in existing centers
- Mixed use development in centers
- Balance in Land Use and Transportation
- Implementation of Transit System

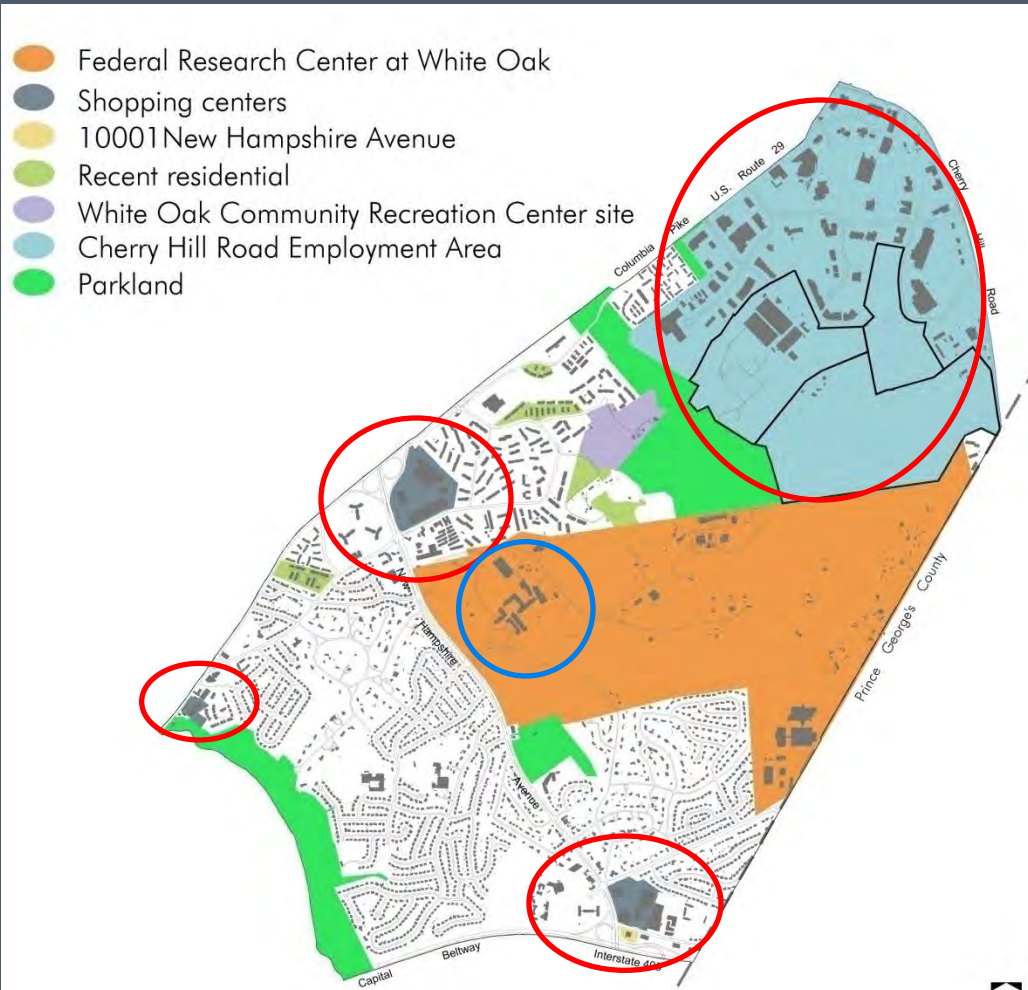
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- FDA – catalyst for new development?
- Synergies between FDA and Washington Adventist Hospital, others?
- Can this be a new R&D Cluster?
- Mixed use development
- Infrastructure Needs:  
Transit options?  
Roads and Connectivity

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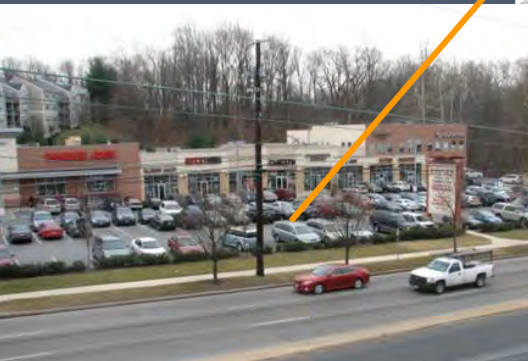
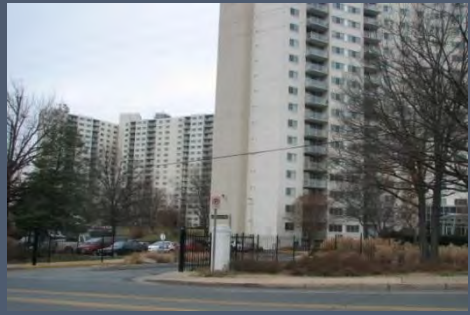
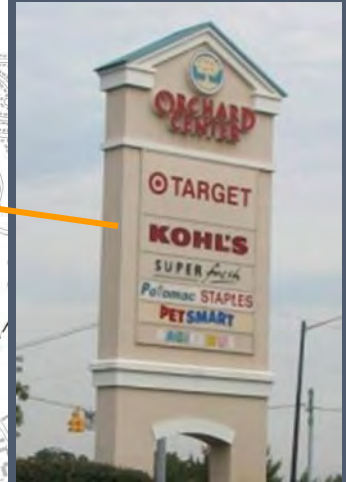
## Physical Planning Challenges



- FRC is large, secured land mass; FDA is small portion
- Activity nodes – separate, disconnected
- Constraints to enhance connectivity: FRC, Paint Branch, existing development
- Segregated uses
- Traditional, auto-dependent suburban location
- Traffic Congestion-local, regional

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## Existing Land Use

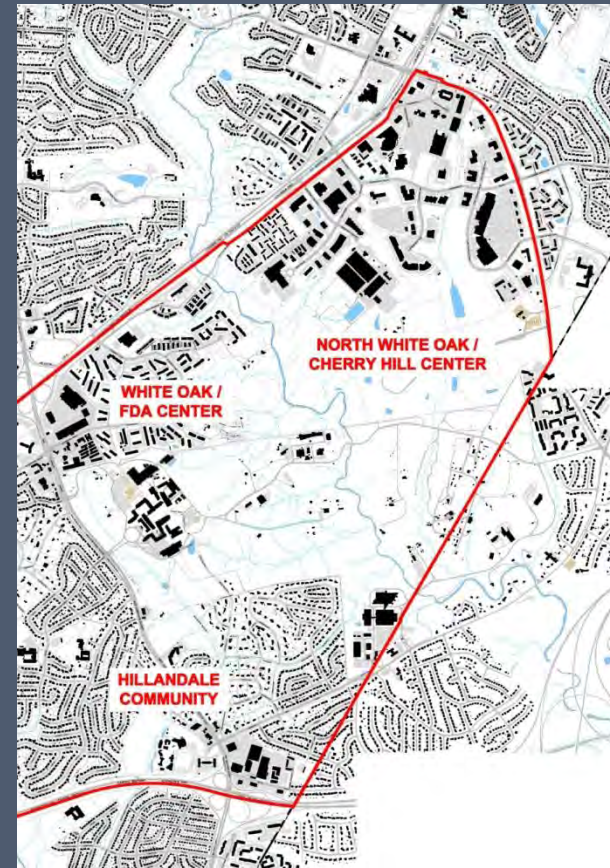
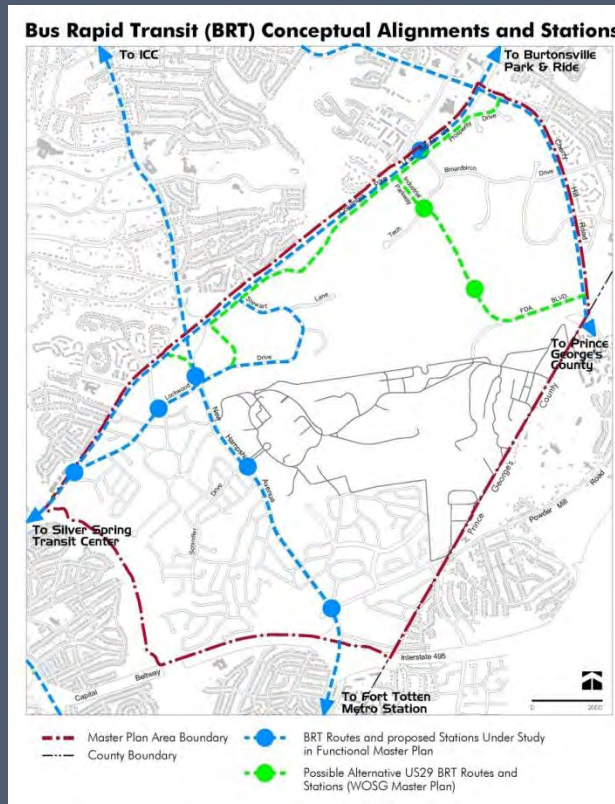


- Master Plan Area Boundary
- County Boundary
- Single Family Residential
- Multi-Family Residential
- Commercial
- Institutional
- Existing Parkland
- Open Space
- Industrial

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## Plan Development: Centers, BRT, Staging

- Worked with CAC and larger community to envision the future
- Focused on three centers
- Commercial property owners – what will work for reinvestment?
- Devised land use scenario based on stakeholder input
- BRT implementation is critical to overall Plan
- Staging plan manages development and infrastructure



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## Plan Development

	Existing	Existing & Approved	2040 COG (adjusted)	2012 Master Plan Scenario
Commercial (sf)	11,187,298	12,000,000	15,854,064	25,434,851
Single-Family DUs	2,260	2,260	2,404	2,785
Multi-Family DUs	<u>4,858</u>	<u>4,858</u>	<u>5,194</u>	<u>12,903</u>
Total Dwelling Units	7,118	7,118	7,598	15,688
Jobs	27,688	31,168	40,063	70,312
MP J/H ratio	3.8/1	4.3/1	5.2/1	4.4/1
SA J/H ratio	1.6/1			



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## Draft Master Plan Vision

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- Sets the stage for a future White Oak that takes optimal advantage of the area's strong assets, capitalizing on the FDA
- Seeks to leverage these assets and establish a foundation upon which White Oak can become a community that offers more options to live, work, and play locally
- Creates synergistic opportunities to reimagine and rethink the future of the surrounding Centers
- Envisions the Centers - White Oak, Hillandale, North White Oak - evolving from conventional suburban locales to vibrant, transit-served, mixed use nodes that are connected by trails, bikeways, and transit
- Includes a major, new mixed-use community on 300 acres in North White Oak/Cherry Hill Road Center (Percontee/Site II)
- Phases new development to provision of Bus Rapid Transit System - routes on Colesville Road, New Hampshire Avenue, Cherry Hill Road linking White Oak's Centers to one another and the broader region
- Provides opportunities for enhanced public amenities, including trails, parks, and bikeways

**AREAWIDE PRELIMINARY RECOMMENDATIONS**

**OVERVIEW OF**

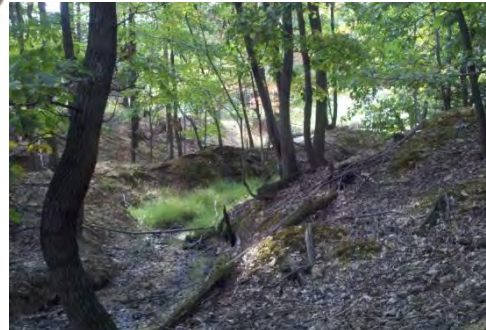
**NATURAL ENVIRONMENT**

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## Natural Systems

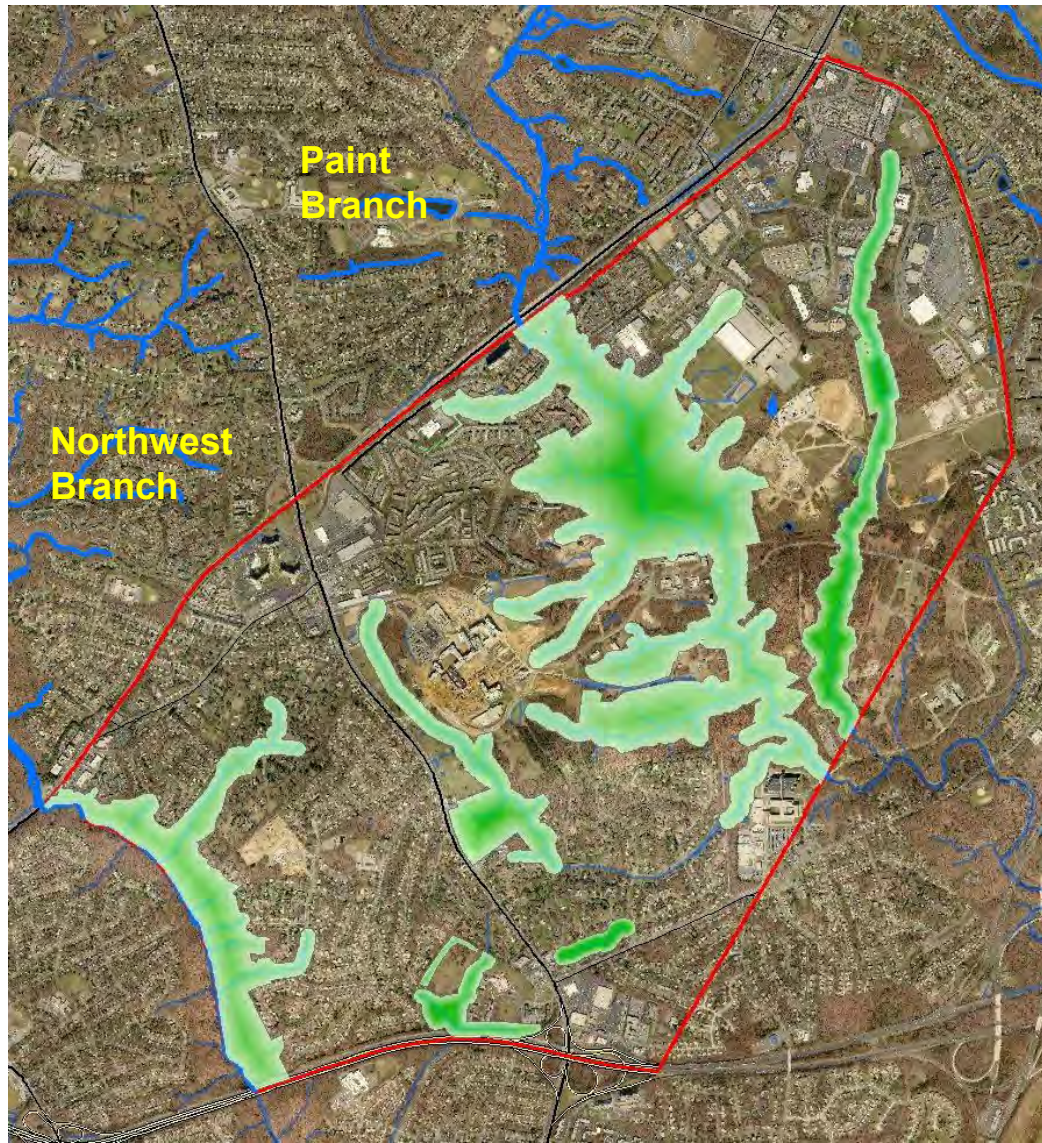
- “Fall zone” between piedmont and coastal area
- Area of great change related to the underlying bedrock
  - Waterfalls
  - Steep slopes
  - Quarries
  - Biodiversity areas



*\* illustrative is for analysis only – not intended as development recommendations*

area diagram

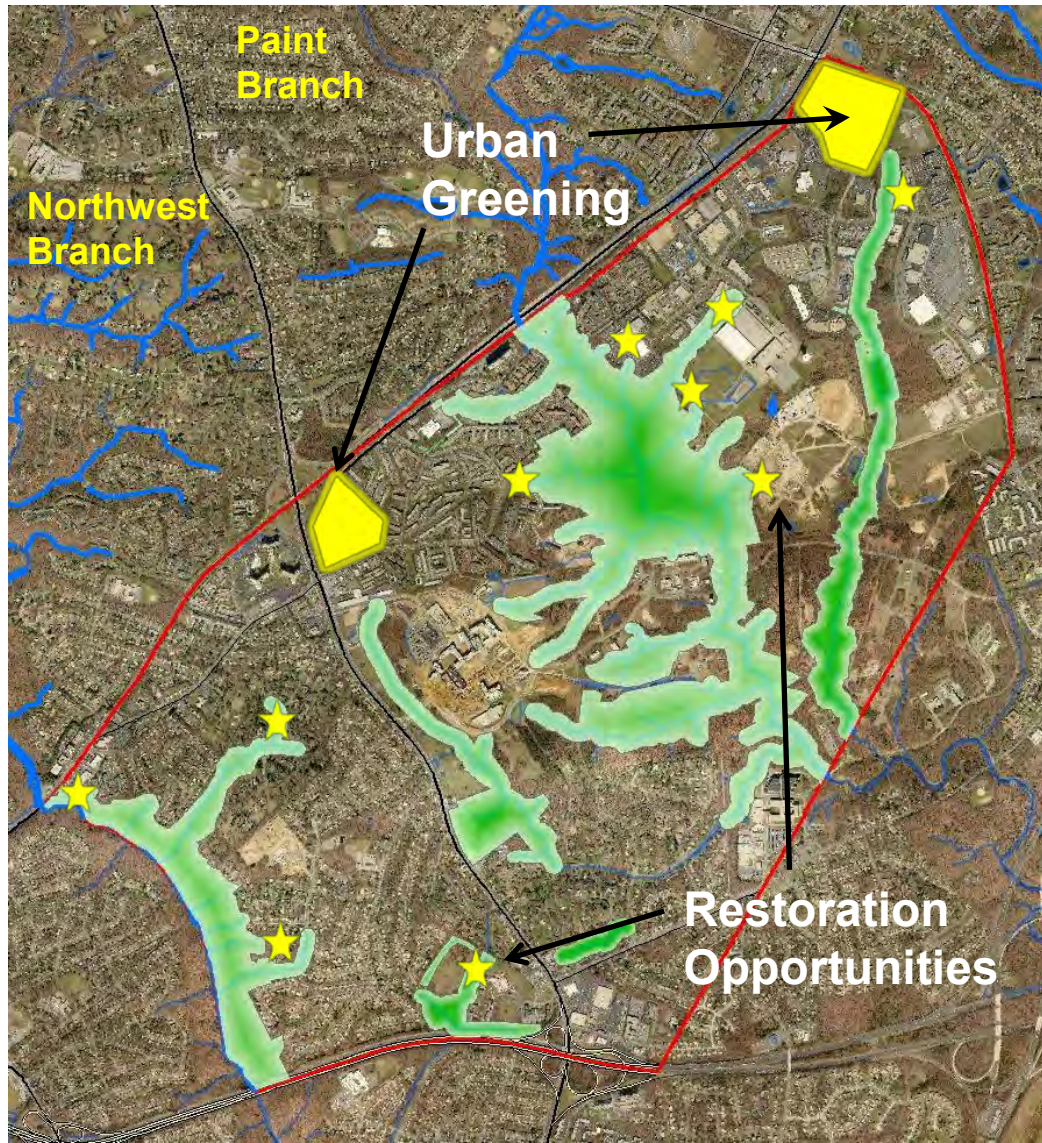
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## Natural Systems

- Allow development at higher densities without compromising the environmental quality of this unique area.
- Development should respond to and incorporate the natural environment, including topography.
- Preserve and restore environmental buffers in forest
- Restrain development from steep slopes
- Avoid streams and buffers for new infrastructure – roads, sewer, water

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## Natural Systems

- Implement stream restoration projects through redevelopment
- Increase tree canopy in redeveloping areas to a minimum of 30%
- Integrate urban green features into redevelopment
- Orient development to maximize exposure to the natural resources
- Investigate options for renewable energy generation

**AREAWIDE PRELIMINARY RECOMMENDATIONS**

**OVERVIEW OF**

**PARKS, OPEN SPACES, RECREATION**

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## Parks & Open Space- Preliminary Recommendations

### Existing Parkland in the Plan Area

- Paint Branch SVP (300 acres)
- Northwest Branch SVP (200 acres)
- Stonehedge LP
- April Stewart Lane LP

### Nearby Parkland

- Martin Luther King Jr. Recreational Park
- Calverton-Galway LP
- Galway Drive LP
- Tanglewood NP
- Valley Mill SP
- West Fairland LP (220 acres)

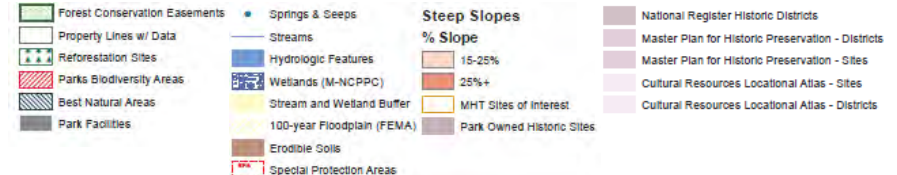
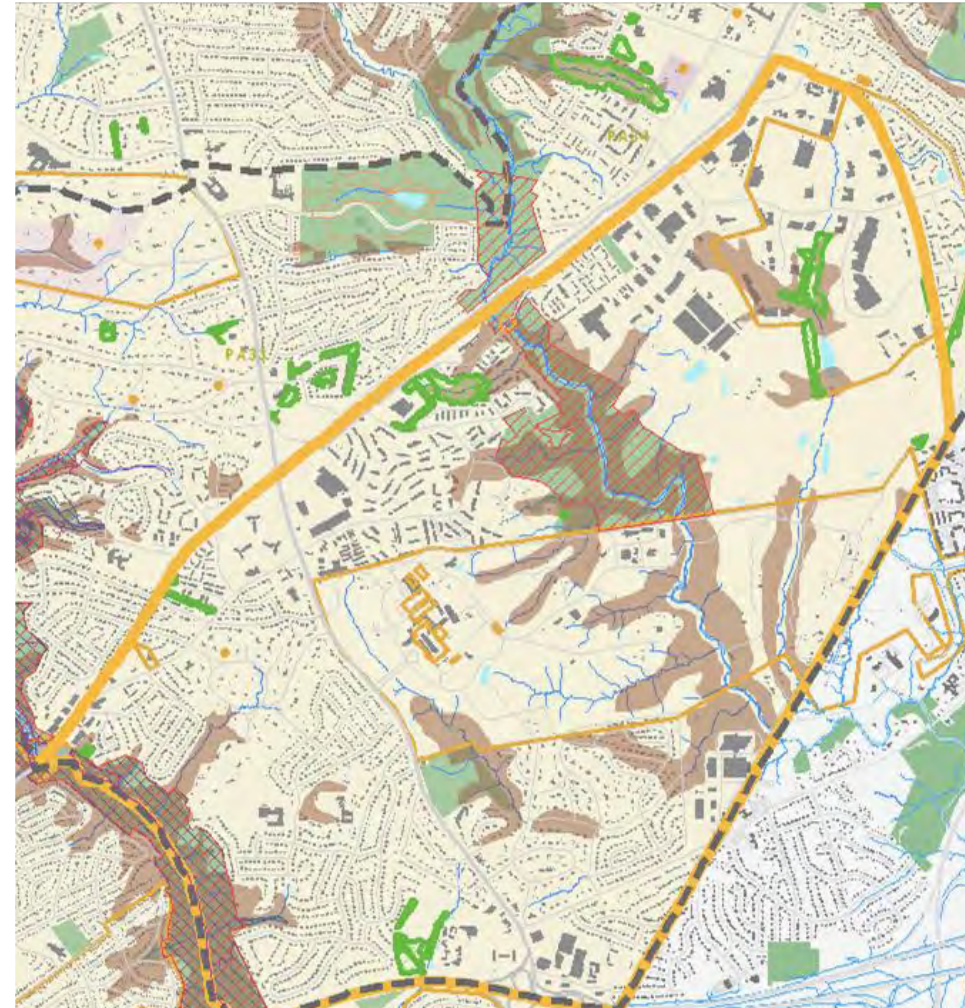


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## Parks & Open Space - Preliminary Recommendations

### Natural Areas in Parks

- Biodiversity Areas
- Steep Slopes
- High Quality Forest
- Stream Valleys

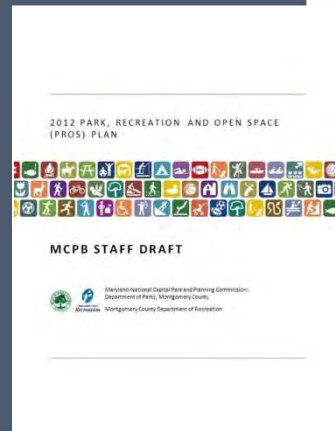


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## Parks & Open Space - Preliminary Recommendations

### Policy Guidance

- Vision 2030 Strategic Plan (2010)
- 2012 PROS Plan
- 1997 White Oak and Fairland Master Plans



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## Parks & Open Space - Preliminary Recommendations

### Community Input

- New parks and open spaces for new residents, employees, and visitors
- Walking and biking access
  - connect two sides of Paint Branch
  - connect neighborhoods to their parks more directly
  - along Northwest Branch from West Hillendale to Four Corners
  - from ICC south along Paint Branch through the FDA property to Prince George's County
- A dog park
- A central area for live entertainment - for bands, meetings, with open play area
- More playgrounds



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## Parks & Open Space - Preliminary Recommendations

### Area wide Recommendations













- An interconnected system of parks, open spaces, sidewalks, bikeways and trails
- In area of highest mixed-use density - a central civic green urban park
- Athletic fields, dog parks, community gardens
- Wooded areas to provide a sense of contact with nature
- Expanded maintenance facilities
- Additional parkland to include high quality natural resources as opportunities become available

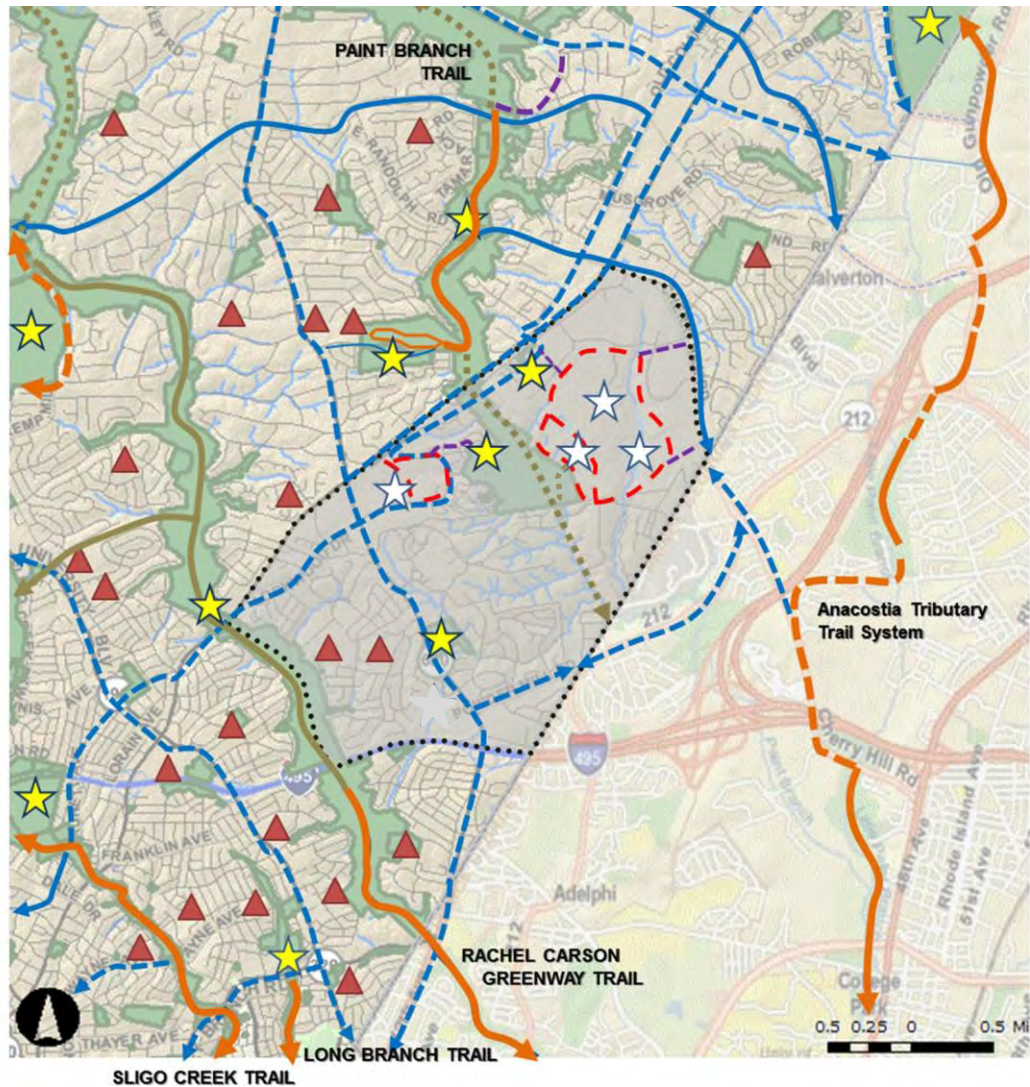


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## Parks & Open Space - Preliminary Recommendations

### Trail and Bikeway Network Recommendations

-  EXISTING BIKEWAY
-  PROPOSED BIKEWAY
-  EXISTING HARD SURFACE PARK TRAILS
-  EXISTING NATURAL SURFACE PARK TRAIL
-  PROPOSED NATURAL SURFACE PARK TRAIL
-  PROPOSED SHARED USE PATH LOOPS
-  EXISTING SIDEWALK OR NON-PARK TRAIL CONNECTOR
-  PROPOSED SIDEWALK OR NON-PARK TRAIL CONNECTOR
-  EXISTING PARK OR RECREATION DESTINATION
-  PROPOSED PARK OR RECREATION DESTINATION
-  SCHOOL
-  SECTOR PLAN BOUNDARY



**AREAWIDE PRELIMINARY RECOMMENDATIONS**

**OVERVIEW OF**

**MOBILITY AND CONNECTIVITY**

The Network

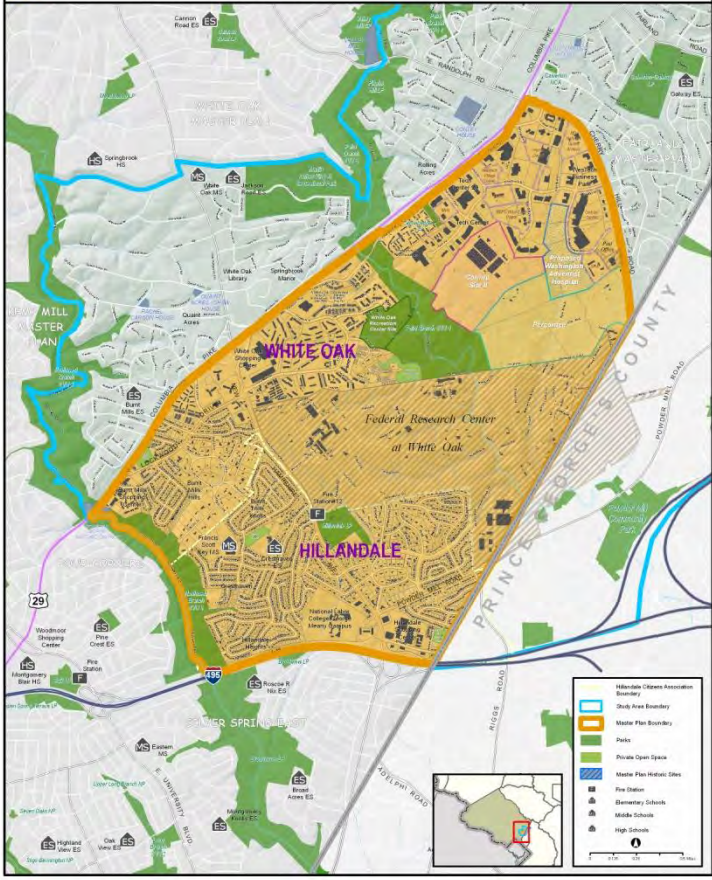
The Land Use Scenarios

Results of Analysis

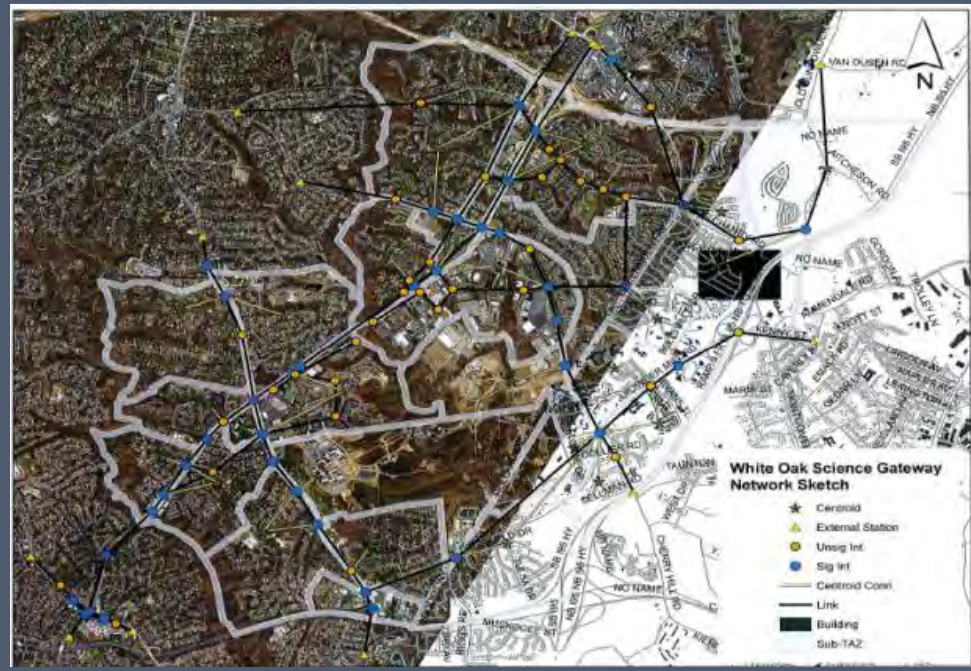
Recommendations



**East County Science Center Master Plan - Context Map**  
 Montgomery County Planning Department, M-NCPPC



# White Oak Science Gateway



## WOSG Land Use/Transportation Scenarios:

1. Existing Conditions: 2010 Land Use/2010 Network

2. Base Future Year: 2040 MWCOG Round 8.0 Land Use/CLRP Network

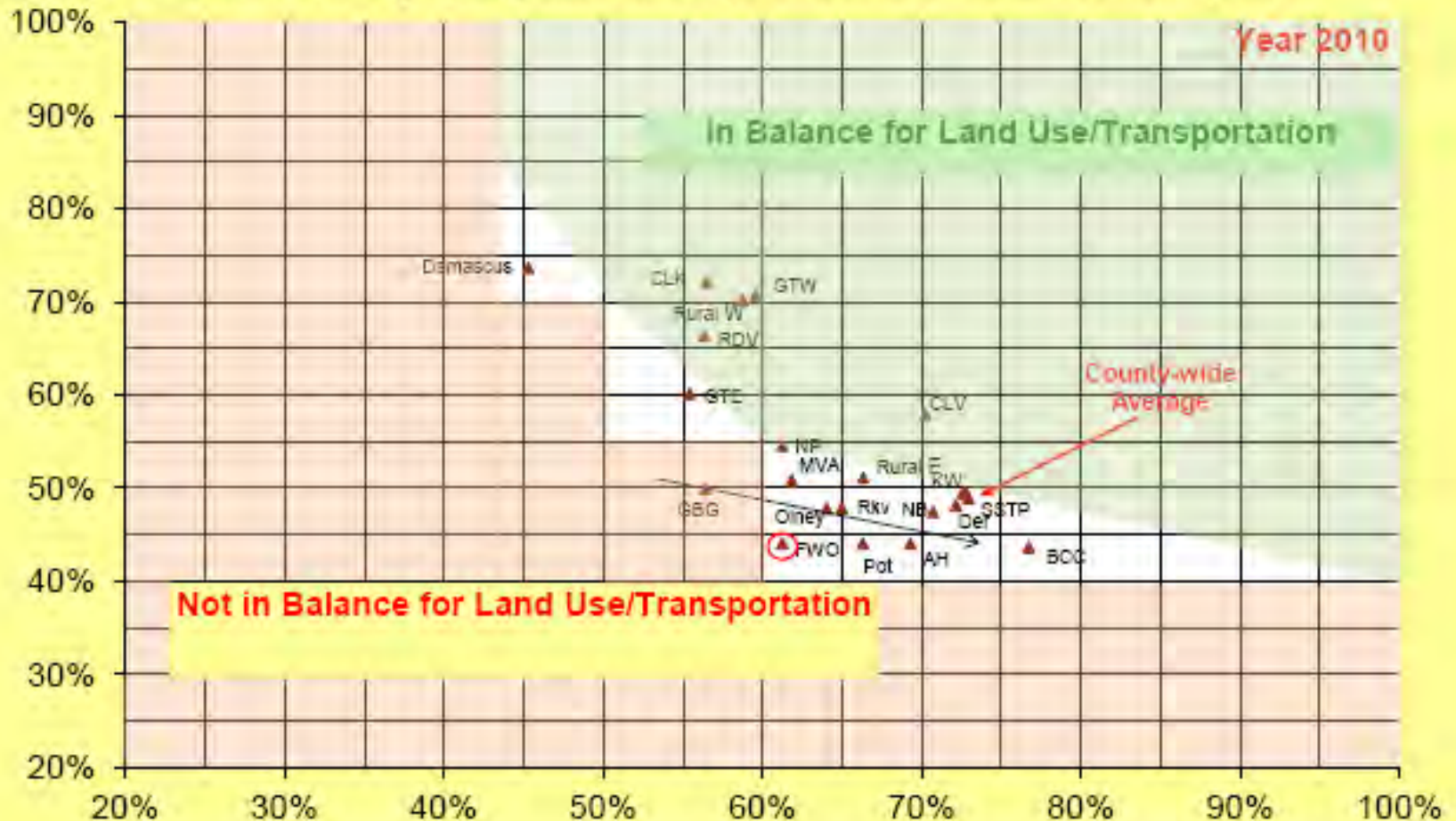
3. Alternative: Alternative “High” Land Use Scenario/CLRP Network + Master Planned interchanges + local roadway network improvements + BRT

WOSG: Summary of Development Numbers				
Development Scenario	Commercial (sq. ft.)	Single Family Dwellings	Multi-Family Dwellings	Total Dwelling Units
Existing Conditions (Built)	11,187,298	2,260	4,858	7,118
Base Future Year (2040 MWCOG Rnd 8.0)	15,854,064	2,404	5,194	7,598
Alternative Scenario	25,434,851	2,785	12,903	15,688

# 2010 PAMR Analysis

## Year 2010 PAMR Chart - WOSG Existing Conditions

**Relative Arterial Mobility:** (Congested Arterial Speed Relative to Arterial Free Flow Speed)

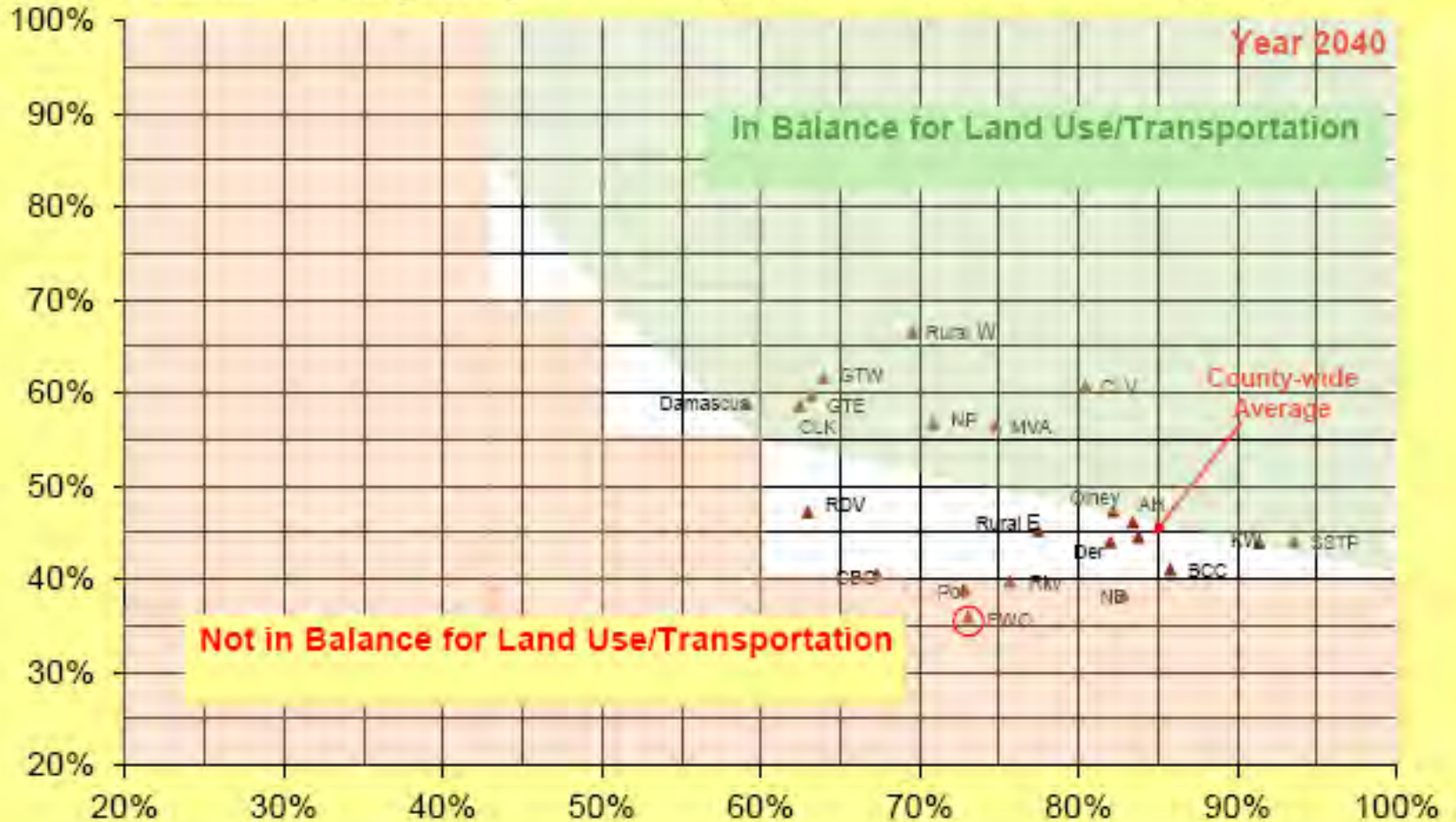


**Relative Transit Mobility:** (Overall Transit Speed Relative to Overall Speed Using Arterials)

# 2040 PAMR Analysis

## Year 2040 PAMR Chart - 1997 White Oak/Fairland Master Plan

**Relative Arterial Mobility:** (Congested Arterial Speed Relative to Arterial Free Flow Speed)

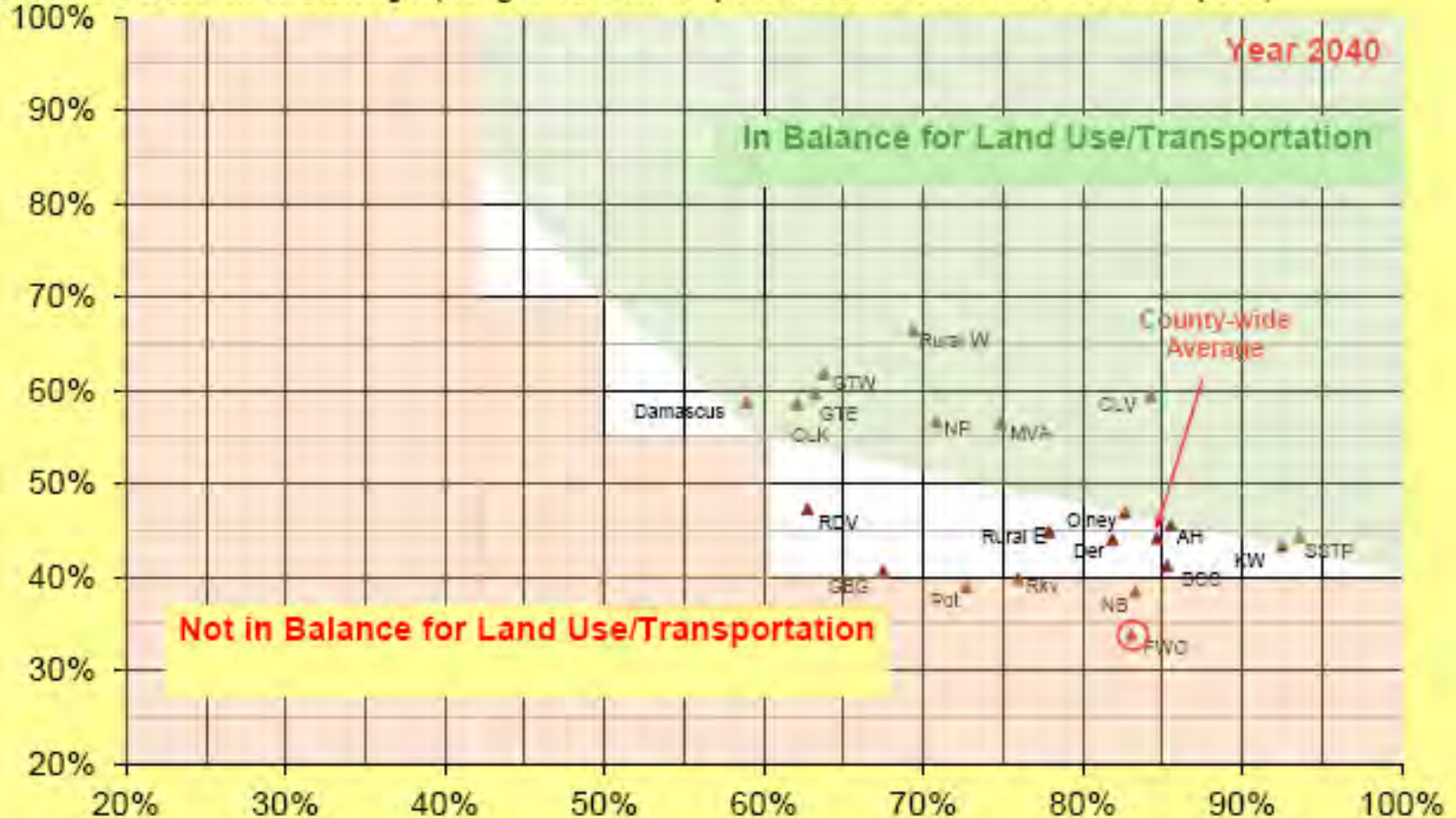


**Relative Transit Mobility:** (Overall Transit Speed Relative to Overall Speed Using Arterials)

# Alternative Scenario PAMR Analysis

## Year 2040 PAMR Chart - High Alternative Scenario w/BRT

Relative Arterial Mobility: (Congested Arterial Speed Relative to Arterial Free Flow Speed)



Relative Transit Mobility: (Overall Transit Speed Relative to Overall Speed Using Arterials)

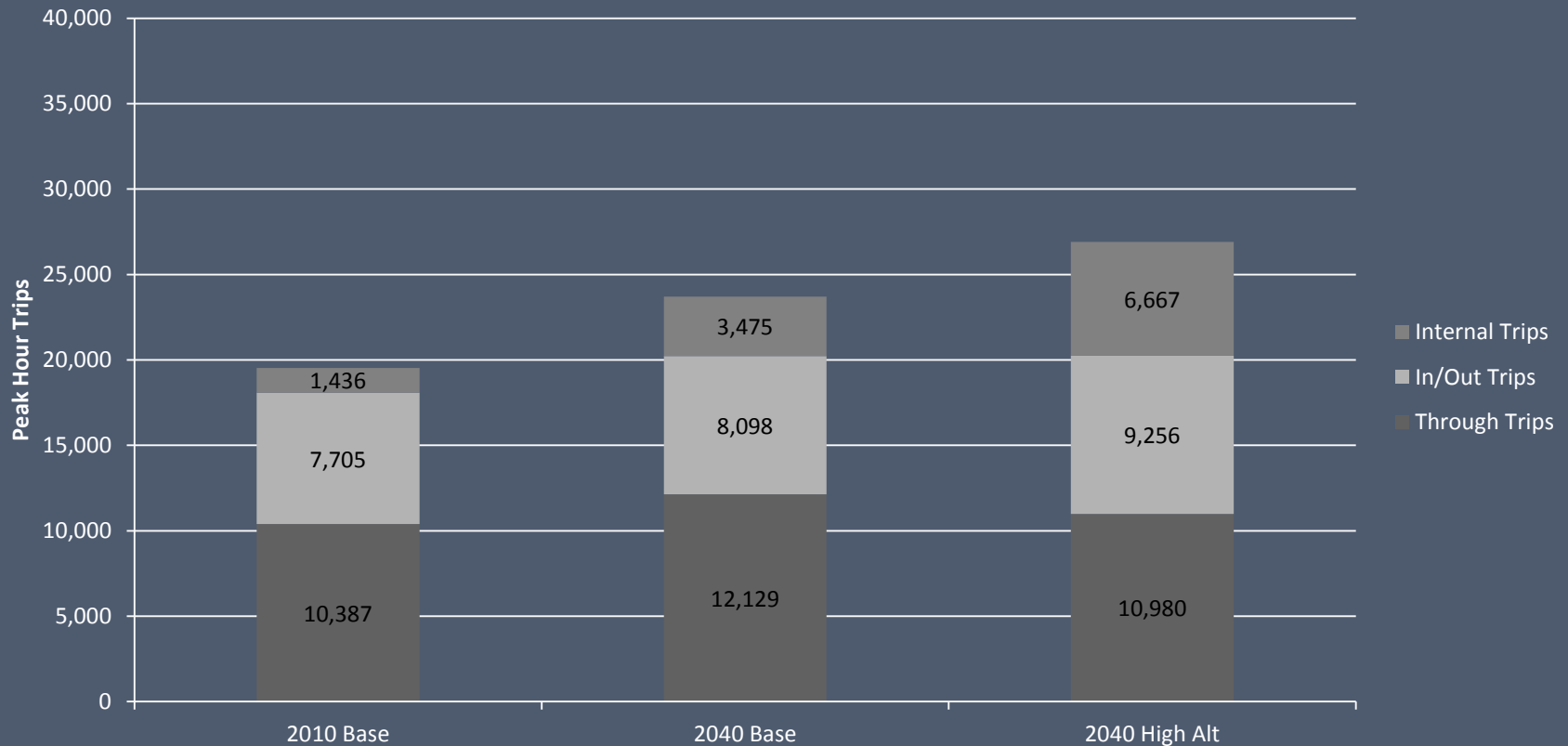
# WOSG - Assumptions

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## Auto Driver Mode Share

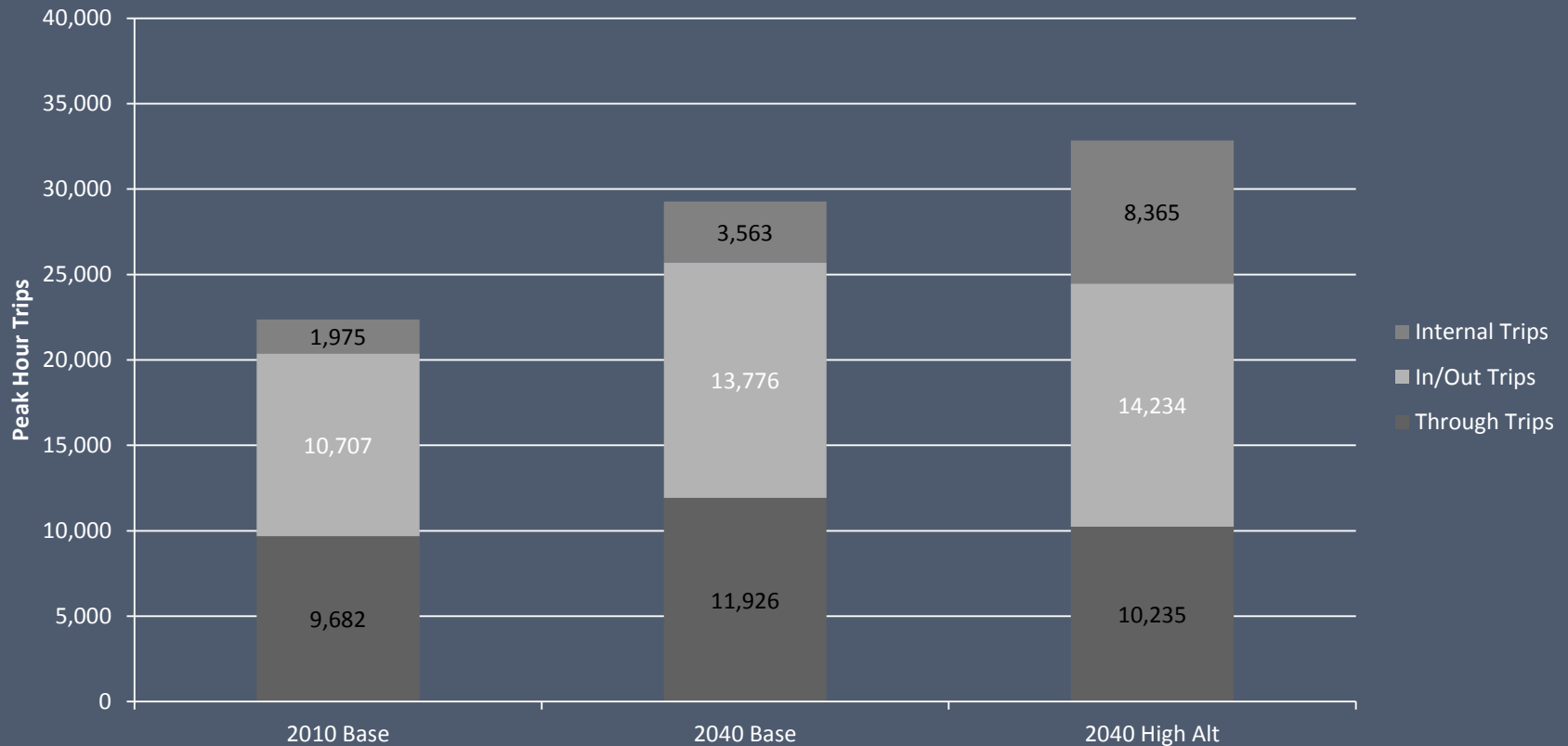
- 2040 Base Scenario
  - 86% of commuters who live outside the plan area drive alone to the plan area
- 2040 Development Scenario
  - 75% of commuters drive to jobs in five locations:
    - Site 2 / Percontee
    - Hillandale Shopping Center
    - White Oak Shopping Center
    - Labor College
  - 86% of commuters who live outside the plan area drive alone to all other subzones in the plan area

# AM Peak Hour Trips



- Reduction in “through trips”
- Increase in “in/out trips”
- Large increase in “internal trips”

# PM Peak Hour Trips




- Reduction in “through trips”
- Increase in “in/out trips”
- Large increase in “internal trips”

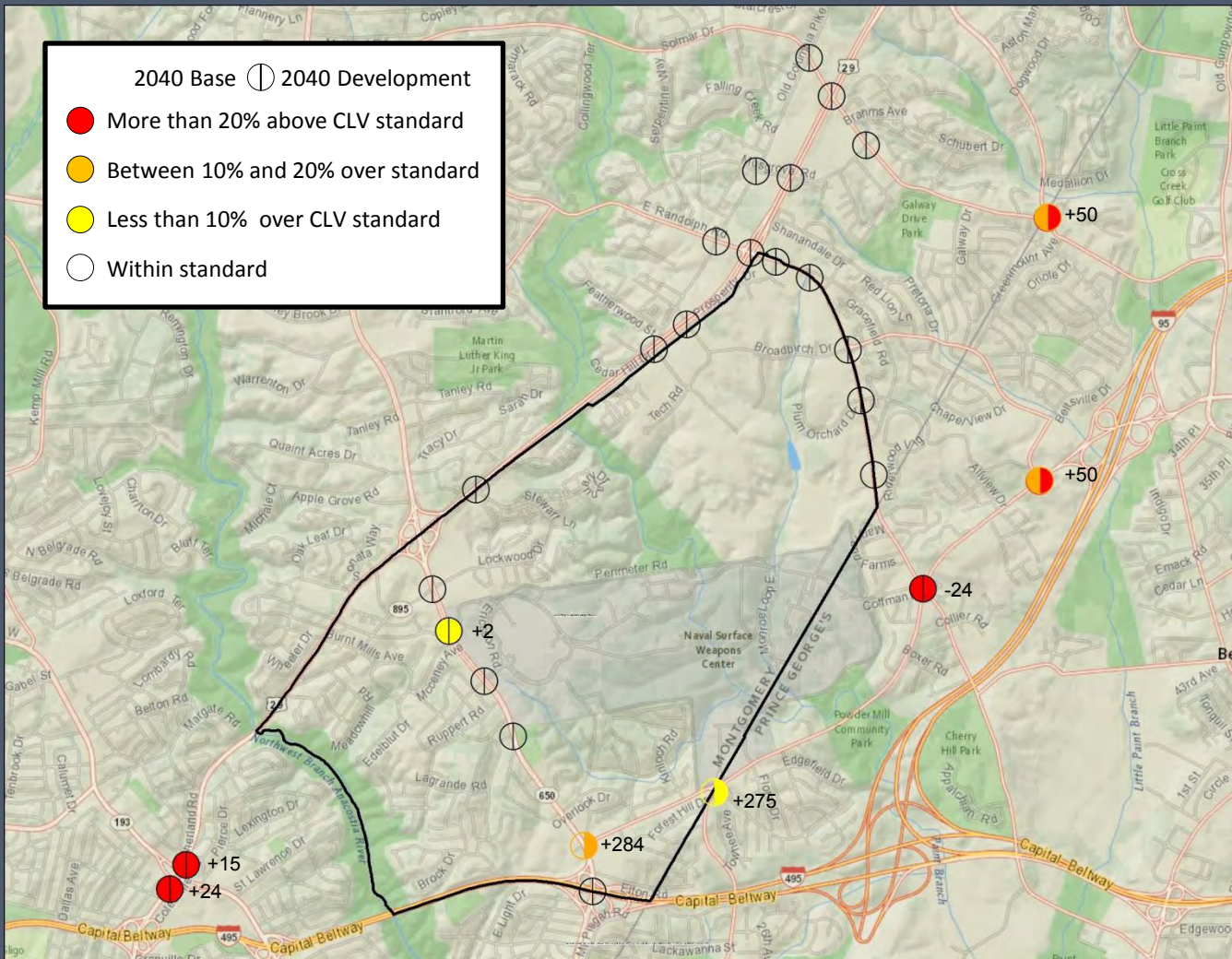
# Internal Trips as % of Total Trips

Scenario	AM Peak Hour	PM Peak Hour
2010 Base	7%	9%
2040 Base	15%	12%
2040 Development	25%	25%

# Critical Lane Volume

- A “planning level” tool to assess overall intersection adequacy
  - Focus is on conflicting movements at intersection in question
  - Does not assess individual lane capacity
  - Does not consider signal timing
  - Transit helps on the margins
- 

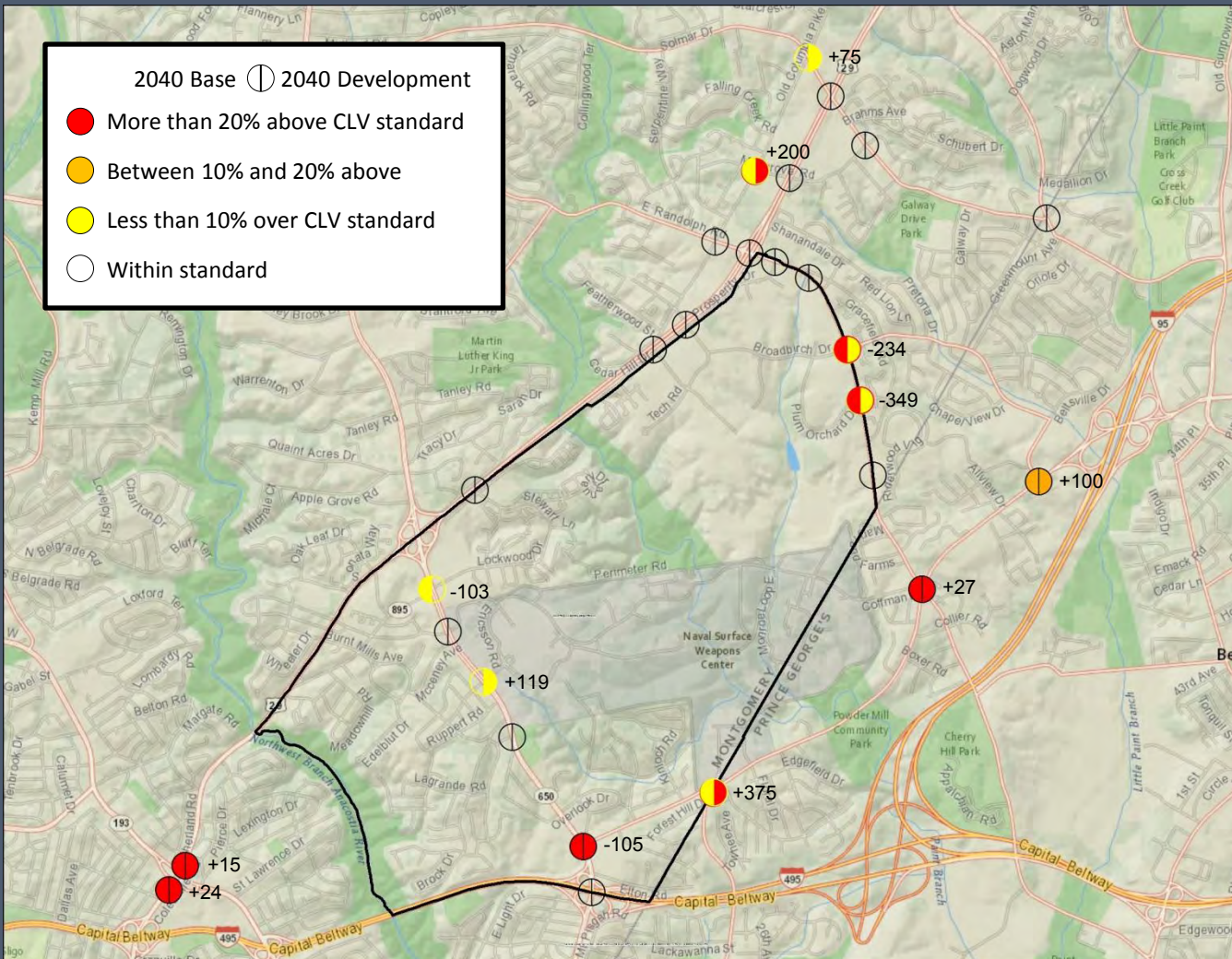
# Change in CLVs AM Peak Hour



## Major Improvements:

- Attaining a 25% NADMS
- Bus Rapid Transit
- Extend Tech Road
- Extend Plum Orchard Drive
- Open Old Columbia Rd bridge
- Intersection improvements







# Change in CLVs PM Peak Hour



## Major Improvements:

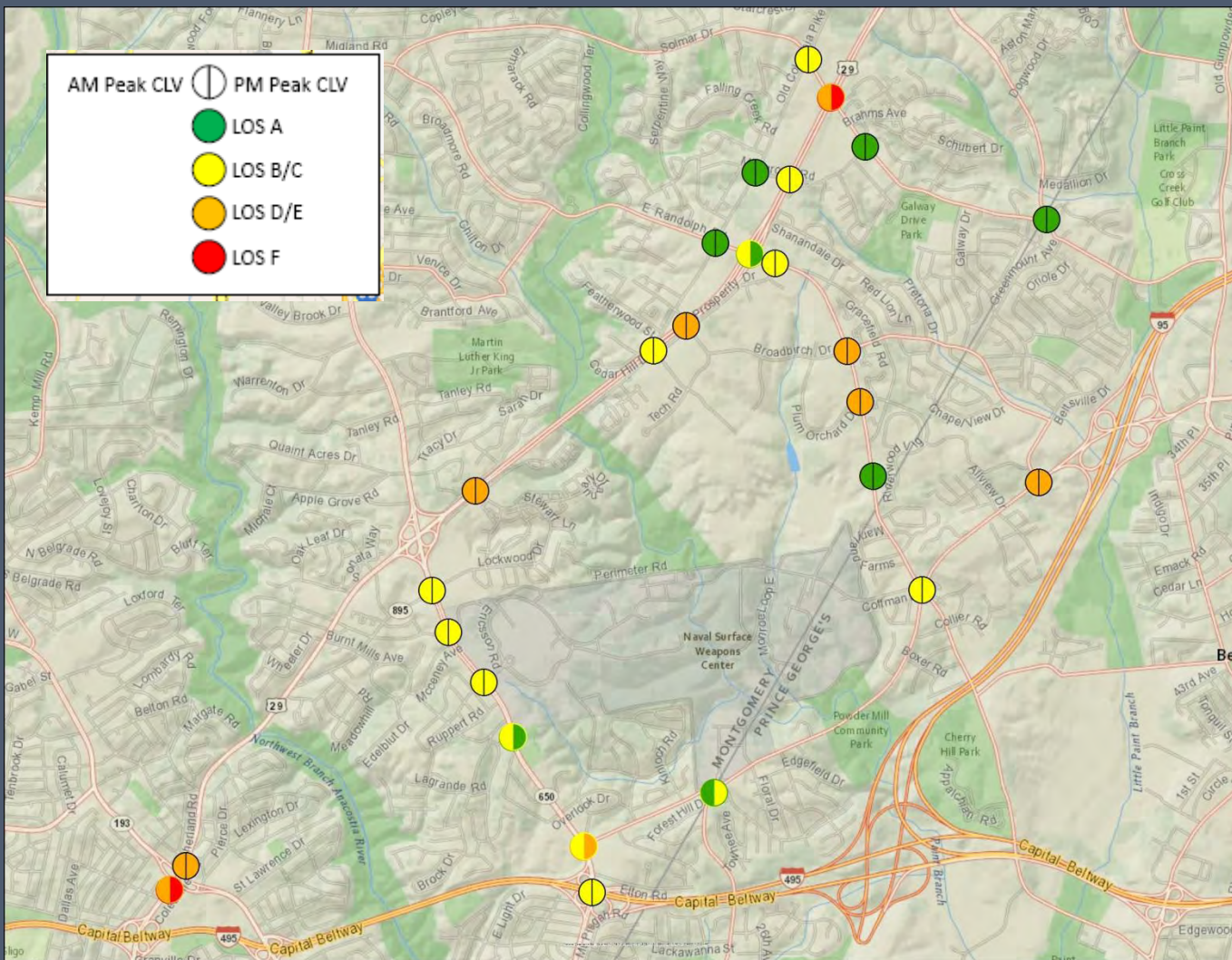
- Attaining a 25% NADMS
- Bus Rapid Transit
- Extend Tech Road
- Extend Plum Orchard Drive
- Open Old Columbia Rd bridge
- Intersection improvements

# WOSG - CLV Evaluation

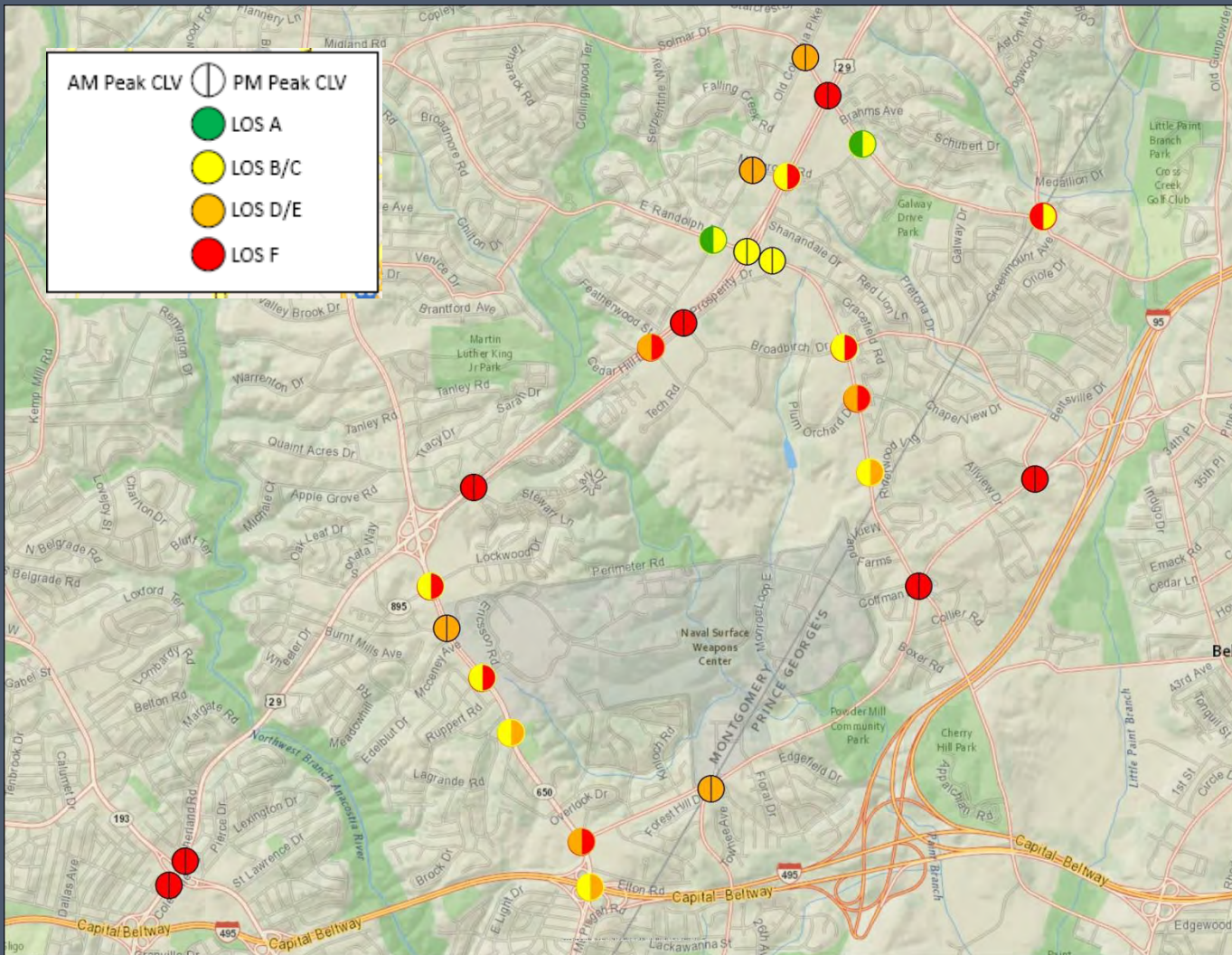
<u>LOS</u>	<u>Critical Lane Volume</u>			
A	0	-	999	
B	1000	-	1149	
C	1150	-	1299	
D	1300	-	1449	
E	1450	-	1600	
F	1601+			

Current Fairland/White Oak  
Standard - 1475

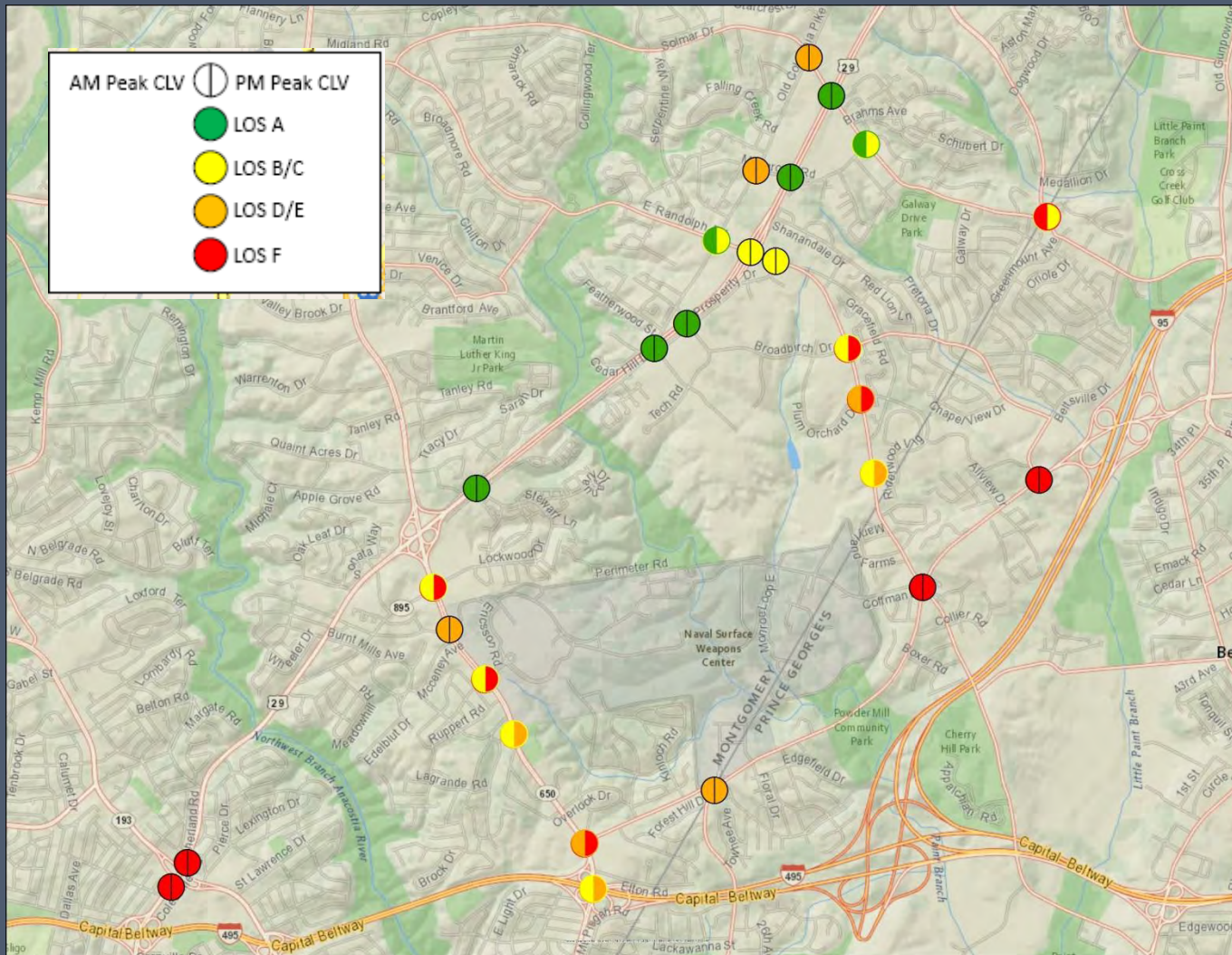
# 2010 Base Scenario



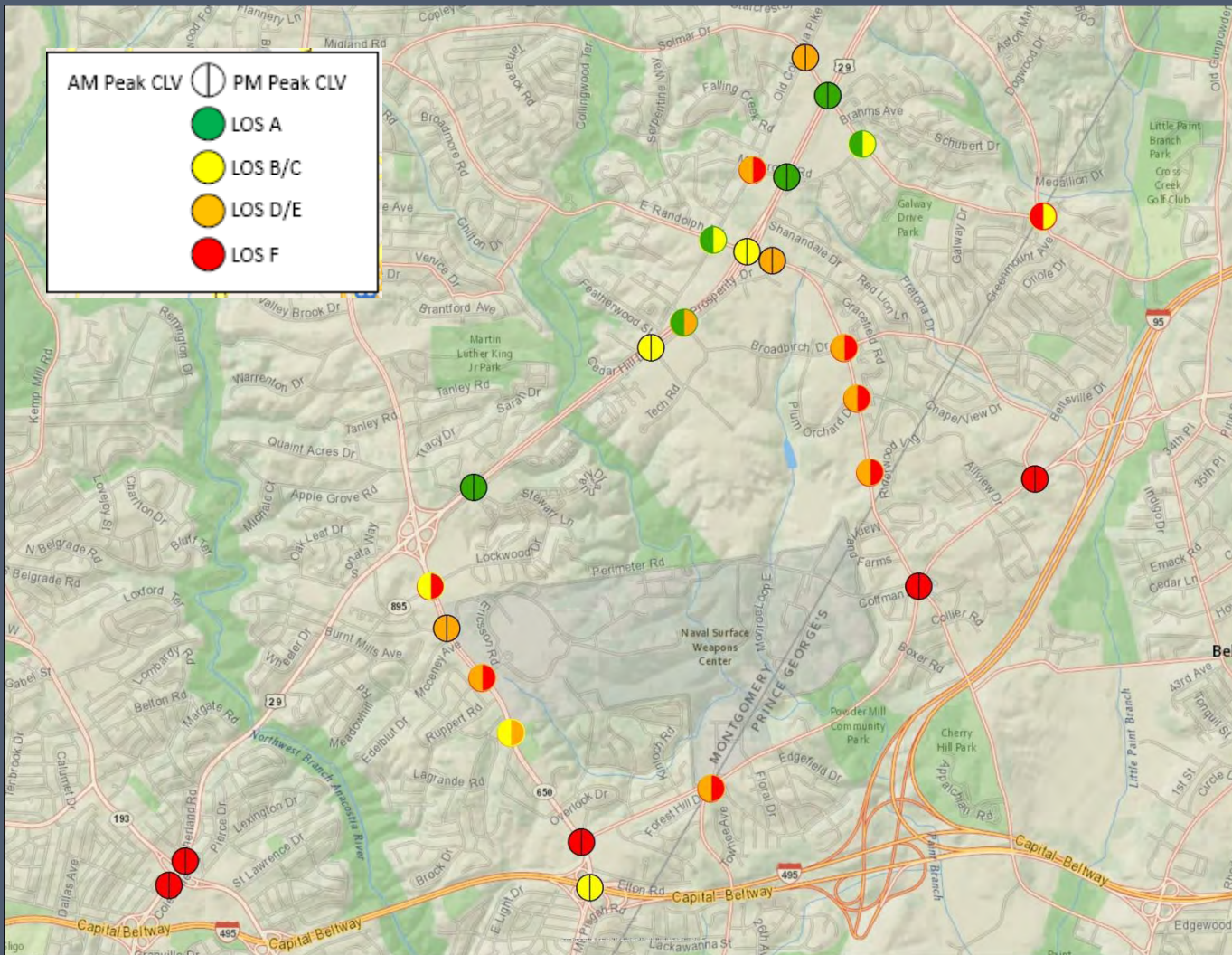
# 2040 Base Scenario



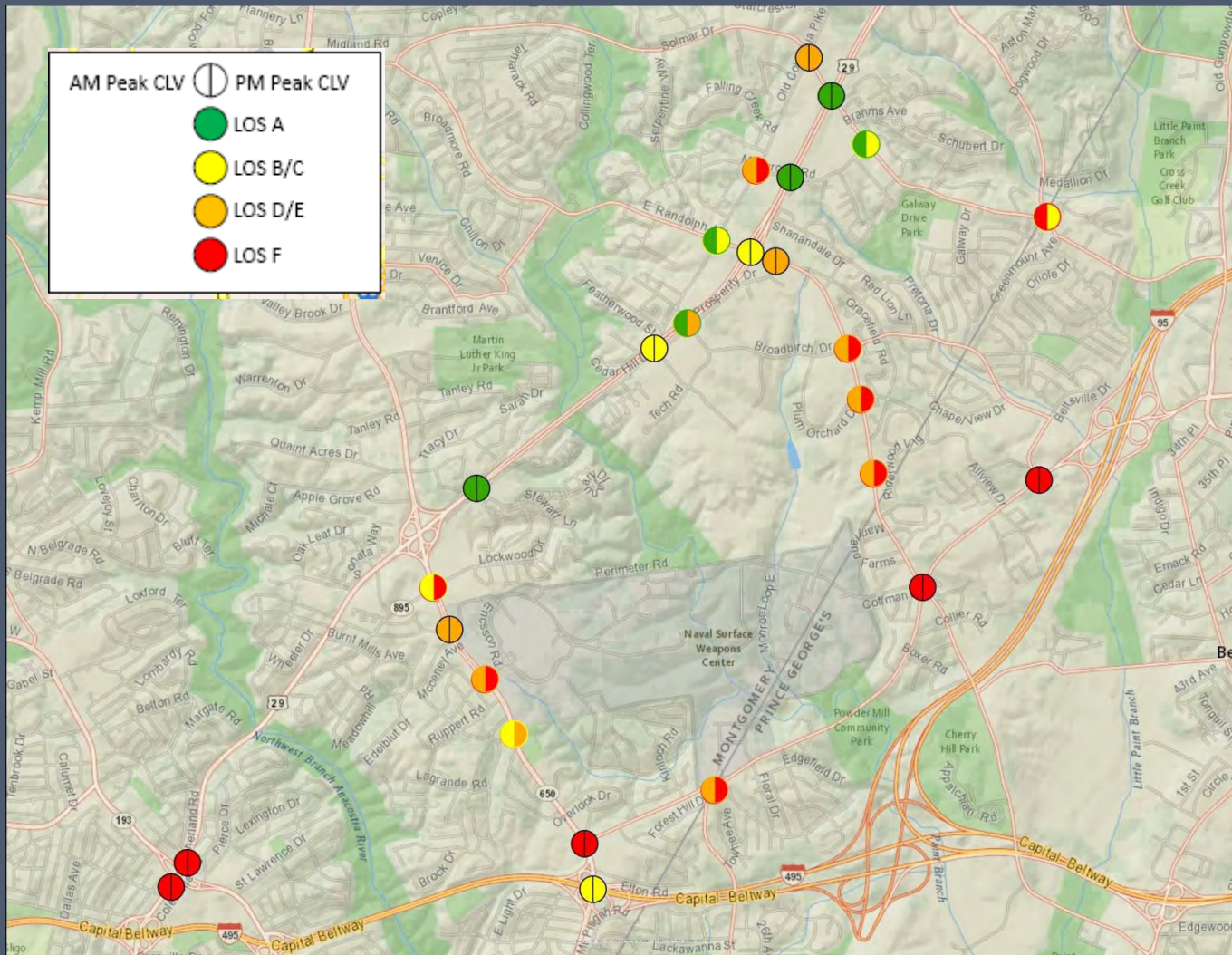
# 2040 Base Scenario with Interchanges



# 2040 Development Scenario with Interchanges

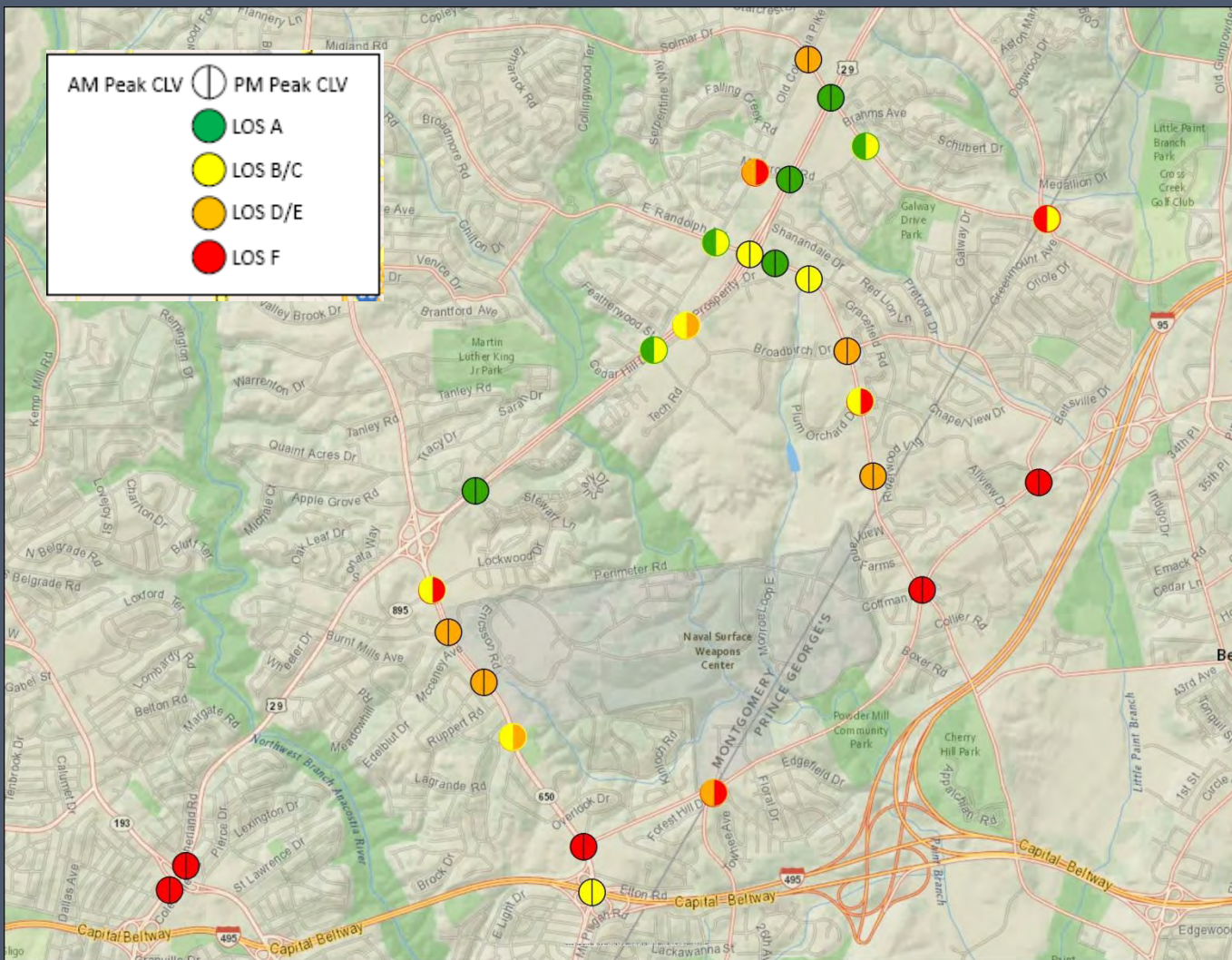


# 2040 Development Scenario with Interchanges & TDM

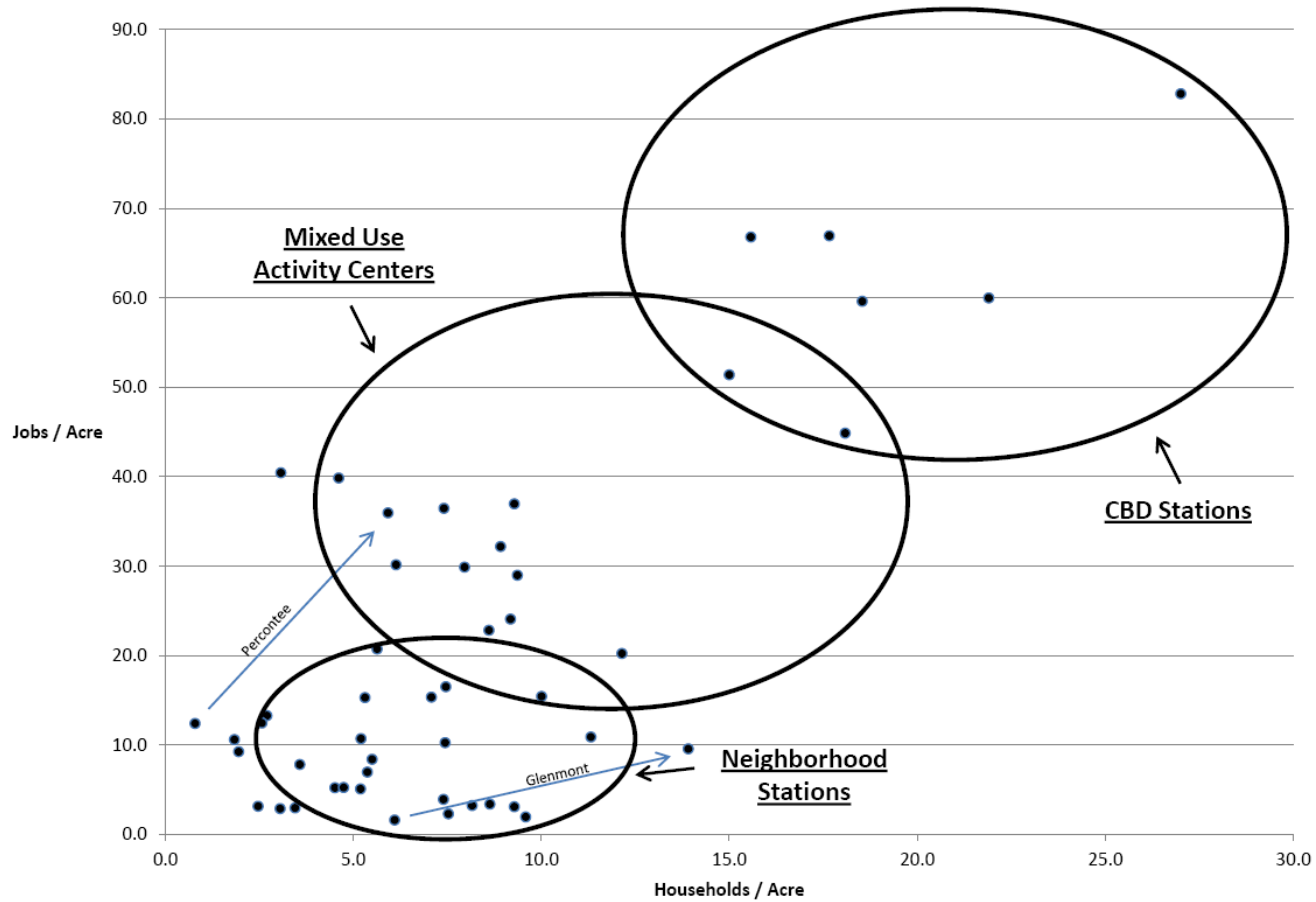




# 2040 Development Scenario with Interchanges & TDM & New Roads & Intersection Improvements

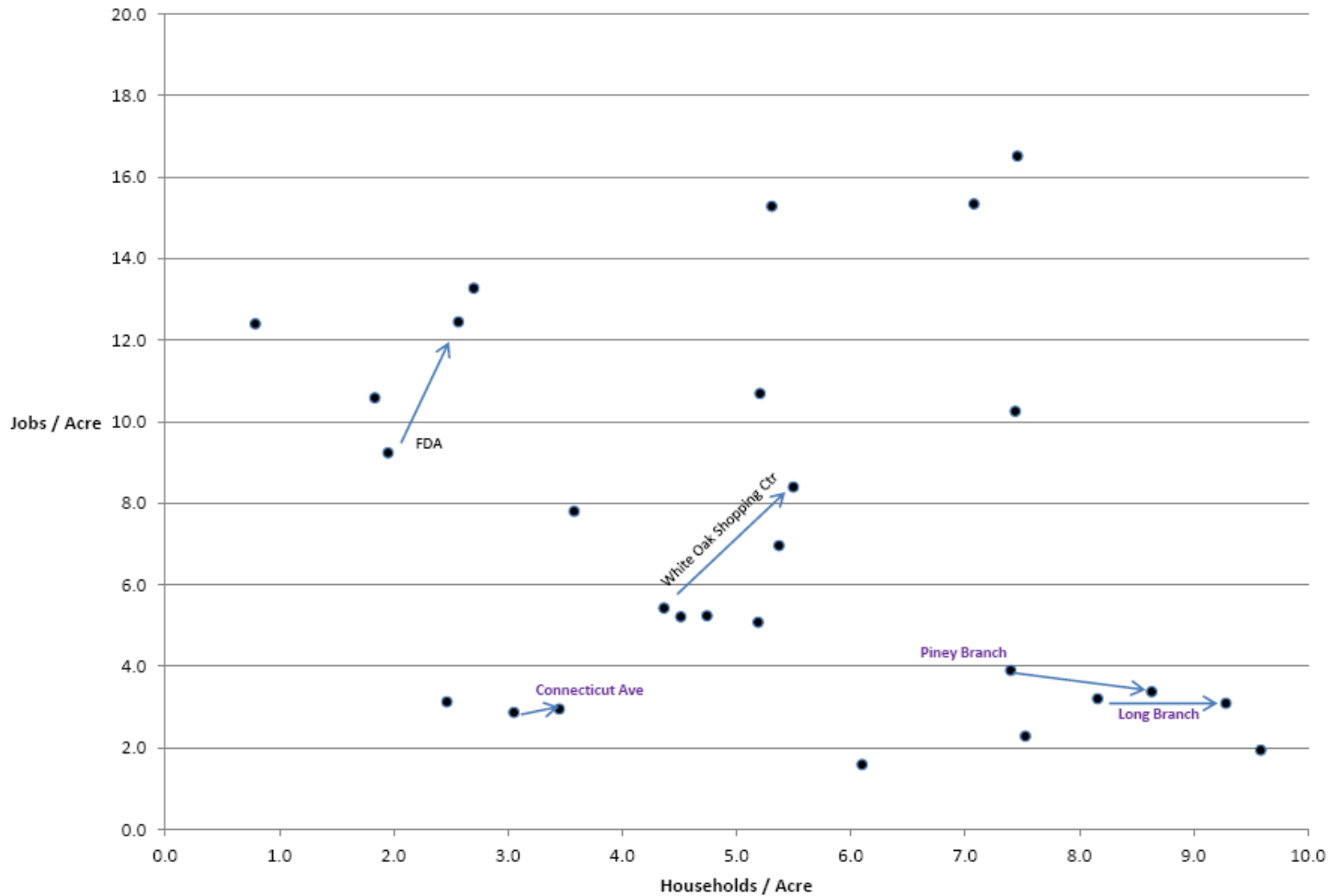


Station Area 1/2 Mile Densities - 2040 - Round 8



# Station Area Densities

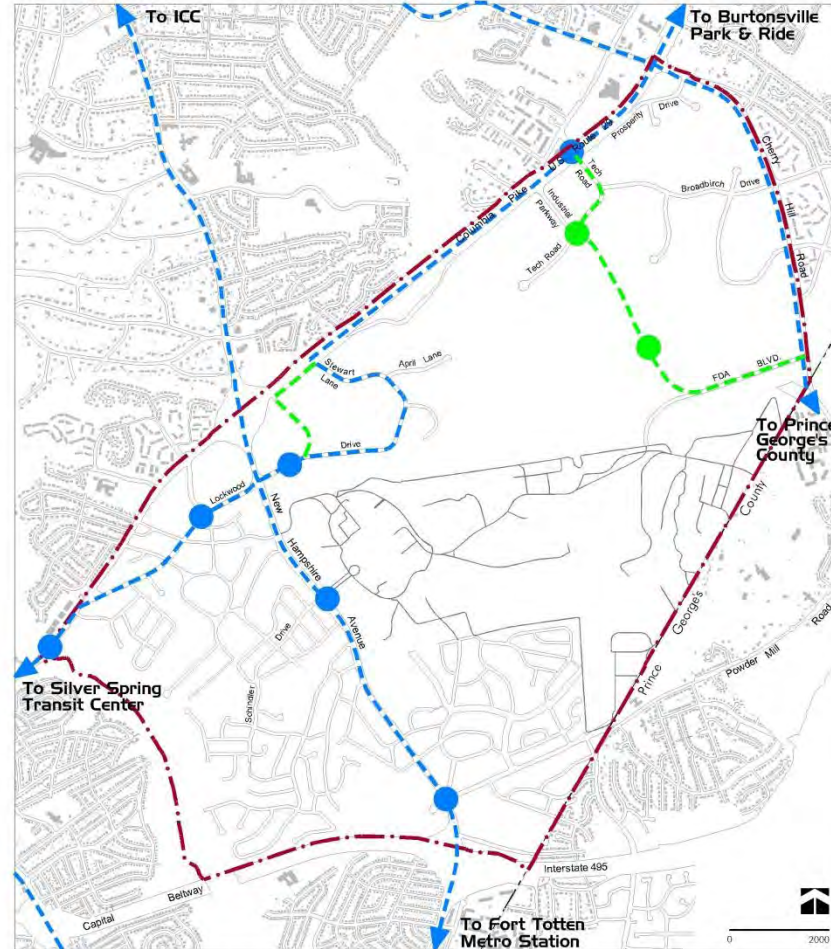
## Station Area 1/2 Mile Densities - 2040 - Round 8



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## BRT Network

### Bus Rapid Transit (BRT) Conceptual Alignments and Stations



K:\WOSG-F\BRT\WOSG-BRT-Fig\_1005-BRT-041

## Overall Approach for Interim ROW Recommendations to Accommodate RTV

- Go beyond Feasibility Study and Task Force Concept Plan (largely a Right of Way issue) in incremental steps
- Use bus average speed for entire corridor as “control” – should equal or exceed Feasibility Study speed assumption
- Begin with smallest reasonable section as a “default section” to see where right of way (beyond existing - not master planned) can be identified with reasonable expectation of relatively low impact. For now - at this level of analysis, ignore intersections and stations.
- After applying any new section compare estimated speeds with the speeds used in Feasibility Study.
- Preliminarily identify any new right of way requirement (both in addition to existing and master planned)
- Await findings of Functional Plan and Facility Planning efforts – especially any subsequent “take a lane” analysis or throughput policy.

Begin with smallest reasonable section as a “default section” to see where right of way (beyond existing to start with - not master planned) can be identified with reasonable expectation of relatively low impact.

## REVERSIBLE ONE-LANE MEDIAN BUSWAY

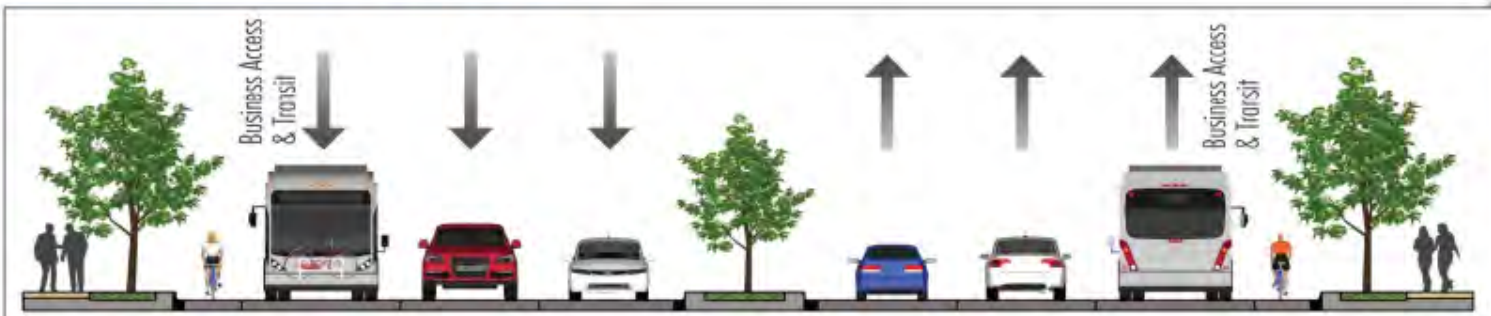
*Unsignalized Intersection Right-of-Way*



120 feet  
wide

## CONCURRENT FLOW CURB LANES

*Unsignalized Intersection Right-of-Way*



116 feet  
wide



## Preliminary Recommendations – Master Plan ROW

<b>Freeway</b>	<b>From</b>	<b>To</b>	<b>Minimum ROW (feet)</b>
Capital Beltway (I-495)	NW Branch Stream Valley	Prince George's County Line	300
<b>Major Highways</b>			
Columbia Pike (US 29)	East Randolph Road / Cherry Hill Road	Paint Branch Stream Valley	100 - 200
	Paint Branch Stream Valley	New Hampshire Avenue (MD 650)	200
	New Hampshire Avenue (MD 650)	Northwest Branch Stream Valley	120
New Hampshire Avenue (MD 650)	Columbia Pike (US 29)	Capital Beltway (I-495)	120

## Preliminary Recommendations – Master Plan ROW

<b>Arterials</b>	<b>From</b>	<b>To</b>	<b>Minimum ROW (feet)</b>
Cherry Hill Road	Columbia Pike (US 29)	Prince George's County Line	80
Powder Mill Road	New Hampshire Ave. (MD 650)	Prince George's County Line	80
Lockwood Drive (MD 895)	Columbia Pike (US 29)	400 Feet West of New Hampshire Ave. (MD 650)	90
Lockwood Drive	400 Feet West of New Hampshire Ave. (MD 650)	East Side of White Oak Shopping Center	90
Lockwood Drive	East Side of White Oak Shopping Center	Lockwood Drive Extended	90
Lockwood Drive Extended	Lockwood Drive	Stewart Lane	90
Stewart Lane	Lockwood Drive Extended	Columbia Pike (US 29)	90
Old Columbia Pike	Stewart Lane	Industrial Parkway	80

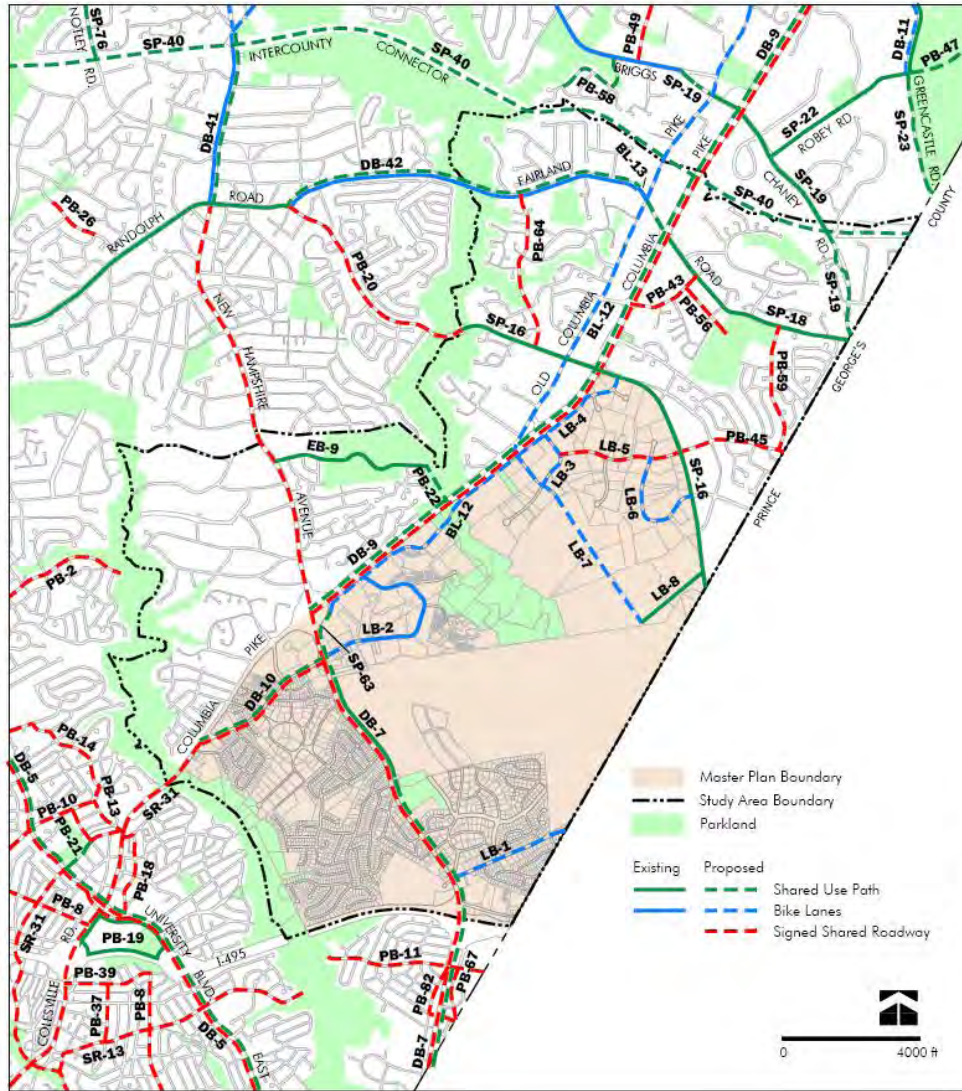
## Preliminary Recommendations – Master Plan ROW

<b>Business District Streets</b>	<b>From</b>	<b>To</b>	<b>Minimum ROW (feet)</b>
Prosperity Drive	Industrial Parkway	Cherry Hill Road	80
Old Columbia Pike	White Oak Shopping Center	Paint Branch Stream Valley	N/A
Old Columbia Pike	White Oak Shopping Center	Stewart Lane	80
Elton Road	New Hampshire Ave. (MD 650)	Prince George's County Line	80
Hillwood Drive	Columbia Pike (US 29)	500 Feet East	80
Percontee / Site II Street A (NW to SE)	Industrial Parkway Extended	Percontee / Site II Street B (NE to SW)	80
Percontee / Site II Street B (NE to SW)	Percontee / Site II Street A (NW to SE)	Cherry Hill Road	80
Industrial Parkway & Industrial Parkway Extended	Columbia Pike (US 29)	Percontee / Site II Street A (NW to SE)	80
Tech Road	1,600 Feet SW of Industrial Parkway	Columbia Pike (US 29)	80

## Preliminary Recommendations – Master Plan ROW

<b>Primary Residential Streets</b>	<b>From</b>	<b>To</b>	<b>Minimum ROW (feet)</b>
Old Columbia Pike	Paint Branch Stream Valley	Industrial Parkway	N/A
April Lane	Stewart Lane	0.3 Miles East	70
Schindler Drive	Crest Park Drive	New Hampshire Ave. (MD 650)	70
Cresthaven Drive	Devere Drive	New Hampshire Ave. (MD 650)	70
<b>Interchanges Within Plan Area</b>			
Columbia Pike (US 29) & Tech Road / Industrial Parkway			
Columbia Pike (US 29) & Stewart Lane			
<b>Interchange Outside of Plan Area</b>			
Columbia Pike (US 29) & Fairland Road			

## Proposed Bikeway Recommendations



## Preliminary Recommendations – New Bikeways

- Shared Use Path on FDA Blvd (LB-8)
- Bike lanes on Prosperity Drive (LB-4)
- Bike lanes on Powder Mill Rd (LB-1)
- Bike lanes on Plum Orchard Dr. (LB-6)
- Bike lanes on Industrial Parkway (LB-7)
- Signed Shared Roadway on Broadbirch Drive (LB-5)

**AREAWIDE PRELIMINARY RECOMMENDATIONS**

**OVERVIEW OF**

**HISTORIC RESOURCES**

# white oak science gateway master plan

## Designated Historic Resource

Resource previously designated in the Master Plan for  
Historic Preservation:

Robert B. Morse Water Filtration Site (#33/22)

10700 and 10701 Colesville Road



# white oak science gateway master plan

## Recommended Historic Resource

Resource under evaluation for addition to the Locational Atlas and designation on the *Master Plan for Historic Preservation*:

Naval Ordnance Laboratory Administration Building (#33-25)  
10903 New Hampshire Avenue



# **white oak science gateway master plan**

## **National Register-Eligible Historic Resources**

---

### **Resources determined to be National Register-Eligible**

The Maryland Historical Trust has evaluated the following resources and determined that they are eligible for listing in the National Register of Historic Places:

- **Naval Ordnance Laboratory Historic District (#33-25)  
(contains Naval Ordnance Laboratory  
Administration Building)**
- **Burnt Mills Hills Historic District (#33/29)**
- **Old Columbia Pike Bridge, Paint Branch, SHA Bridge  
#15035 (#33/26)**

# white oak science gateway master plan

## Potential Future Evaluation of Possible Resources

---

**Resources that may merit future evaluation for architectural & historical significance (the following are not currently under evaluation in the WOSG Master Plan):**

**National Register-eligible resources:**

Burnt Mills Hills Historic District | Old Columbia Pike Paint Branch Bridge

**Mid-20<sup>th</sup> Century Resources and Modernist Architecture:**

Hillandale Historic District (1930s-40s) | Xaverian College, (now AFL-CIO Labor College) (1931-1971) | PEPCO Building (c1940s) | Hillandale Fire Station (1945)  
Hillandale Recreation Center (c1945; c1952) | Unitarian Church (1955)  
Our Savior Episcopal Church (1958) | Crest Park Historic District (1961)  
W. Hillandale Pool (1962) | Dow Jones Building (1963) | White Oak Professional Building (1965) | Sears White Oak Store (1966) | Coca Cola Plant (1969)  
Hillandale offices (c1975)

**Other Resources:**

Stewart Lane community, c1900-1960 | Devil's Den

# white oak science gateway master plan

*Existing Master Plan Historic Site:*

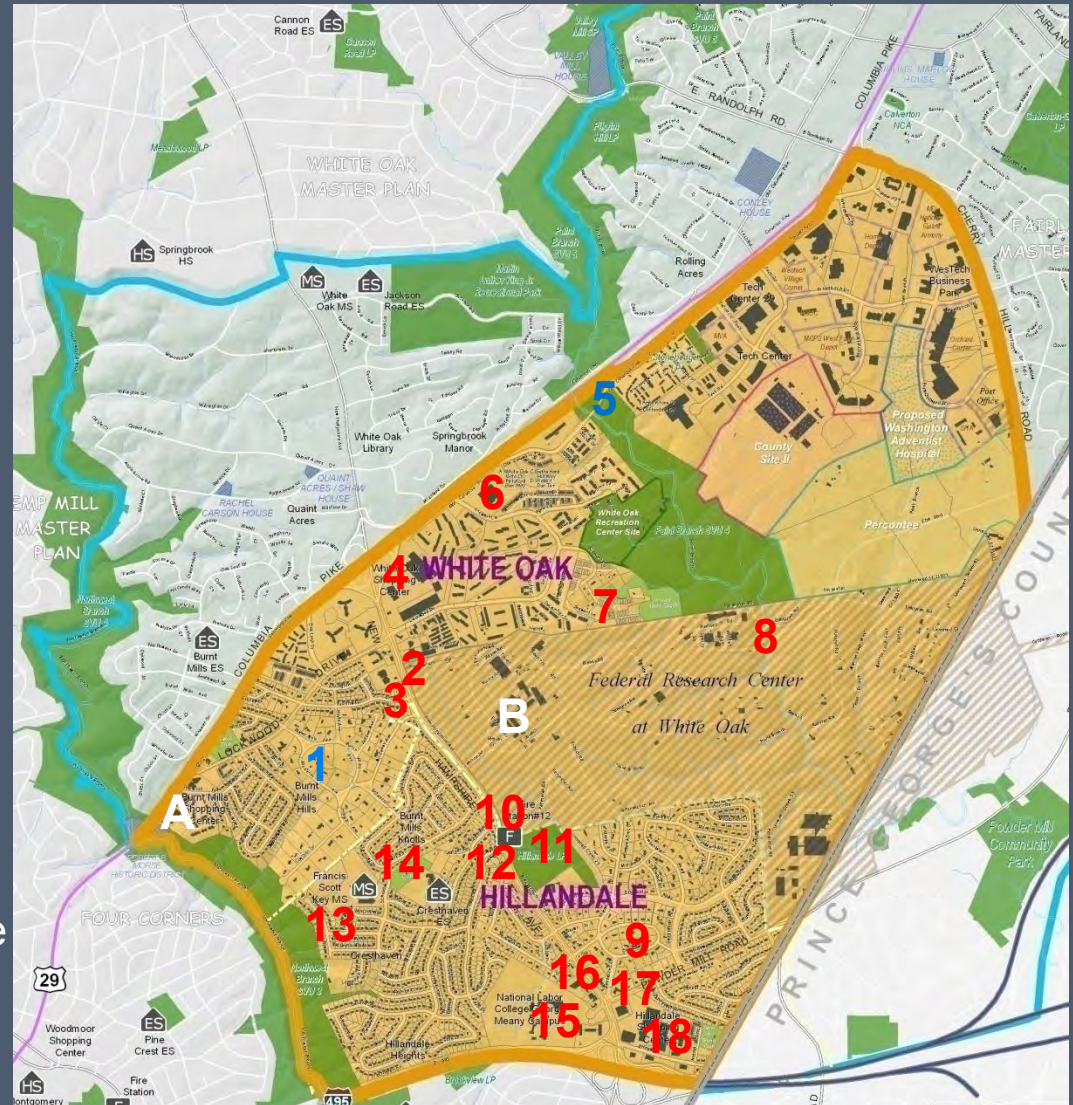
A. Robert B. Morse Complex

*Recommended Master Plan Site:*

B. Naval Ordnance Historic District

*Potential Historic Resources:*

1. Burnt Mills Hills Historic District
2. White Oak Professional Building
3. PEPCO Building
4. Sears White Oak Store
5. Paint Branch Bridge
6. Dow Jones Building
7. Stewart Lane Community
8. Devil's Den
9. Hillandale Historic District
10. Hillandale Fire Station #12
11. Hillandale Recreation Center
12. Hillandale Parks Department Office
13. Crest Park Historic District
14. West Hillandale Pool House
15. Xaverian College
16. Unitarian Church
17. Our Savior Episcopal Church
18. Coca Cola Plant



**PRELIMINARY RECOMMENDATIONS**

**FOR THE CENTERS**

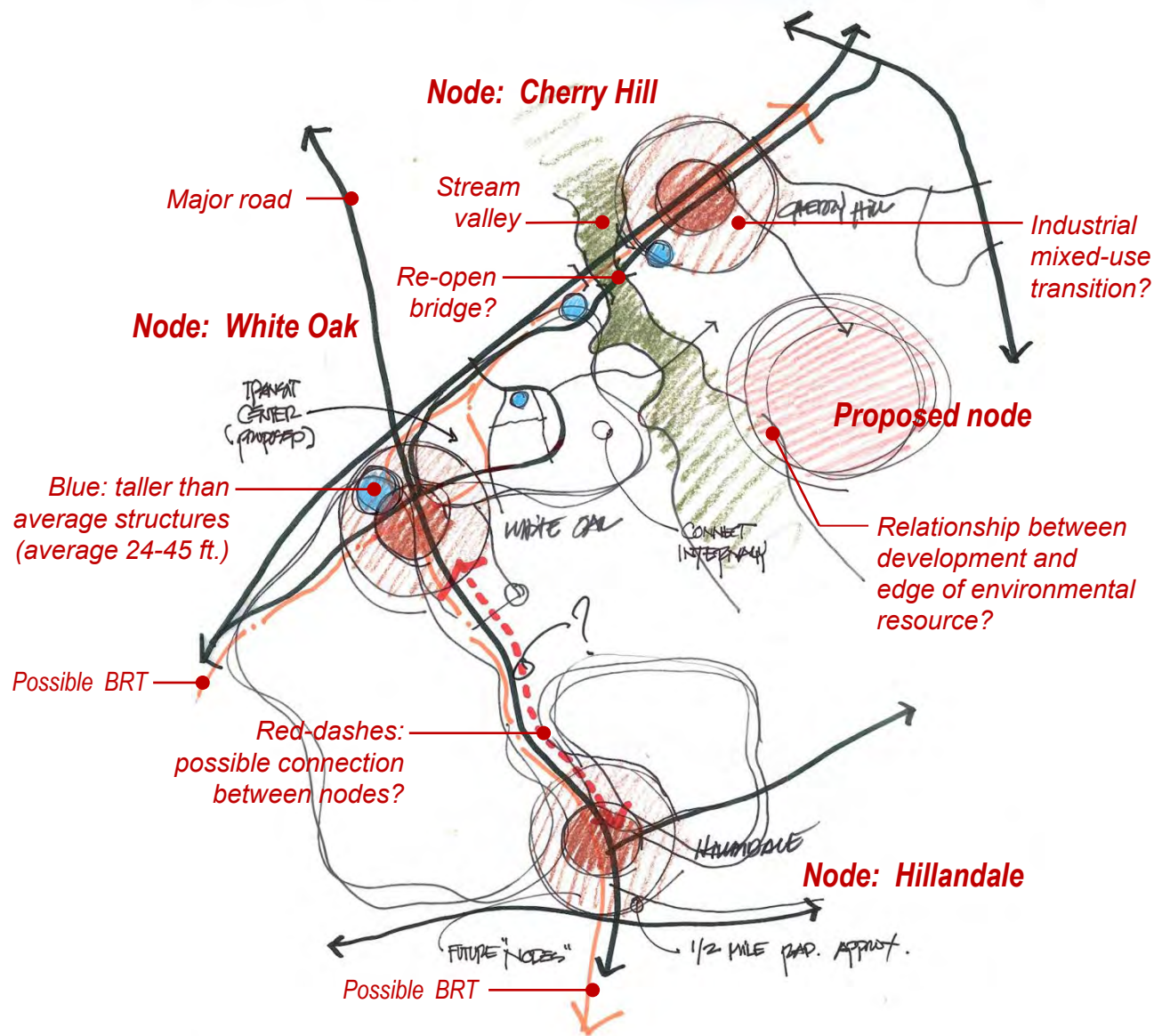
**White Oak/FDA Center**

**Hillandale Community**

**Burnt Mills Community**

**North White Oak/Cherry Hill Road Center**

# white oak science gateway master plan



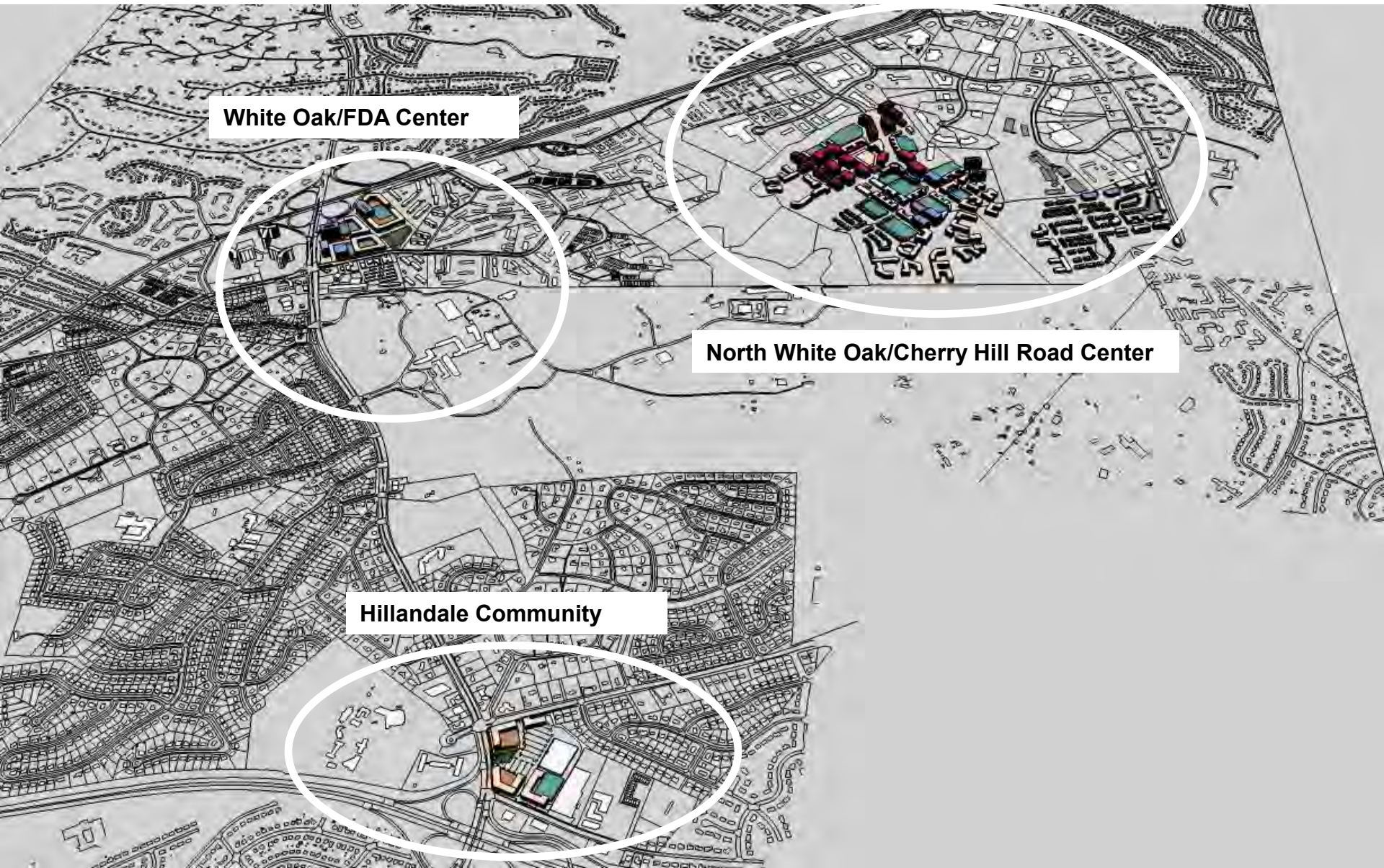
## Goals

- Reinforce existing commercial centers along established corridors
- Concentrate development at nodes focused around future transit
- Balance auto and transit access by promoting non-auto movement within walking distance of future transit
- Improve node legibility by defining their edges, providing them with landmarks, and developing them as focus of civic, recreational, residential and commercial activity
- Add streets to improve local networks and reduce block sizes in high intensity areas
- Improve internal connectivity between nodes to reduce reliance on existing roads for local traffic

\* illustrative is for analysis only – **not** intended as development recommendations

area diagram

# white oak science gateway master plan

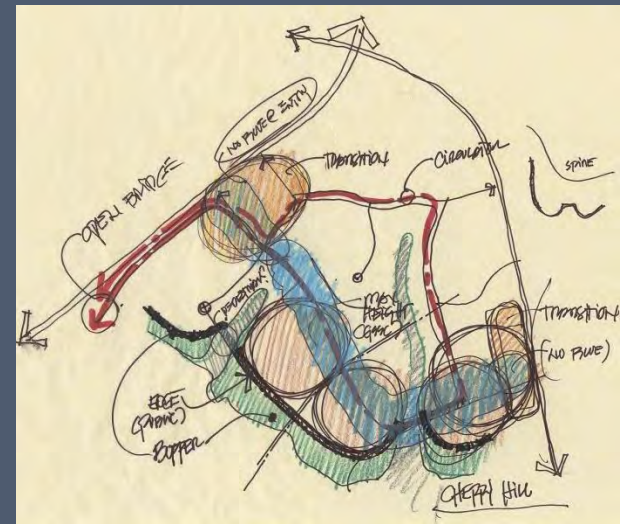
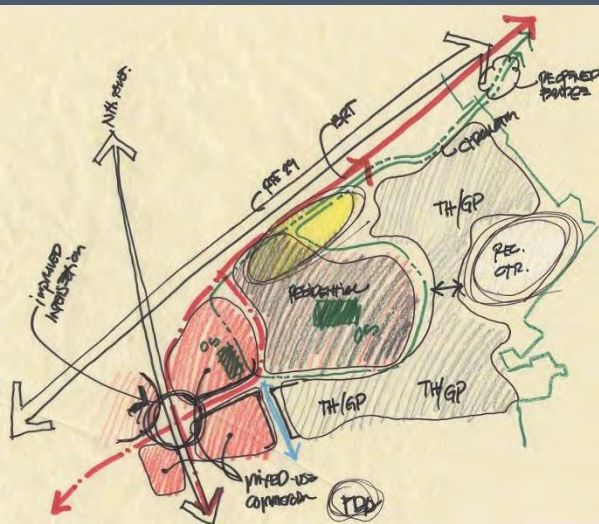


White Oak/FDA Center

North White Oak/Cherry Hill Road Center

Hillandale Community

# white oak science gateway master plan



White Oak/FDA Center

Hillandale Community

North White Oak/Cherry Hill Center



Image: Mixed-use Business Center



Image: Village Center



Image: Mixed-Use Science Campus

\* illustrative is for analysis only – **not** intended as development recommendations

# white oak science gateway master plan

## Preliminary Recommendations

### Zoning Approach:

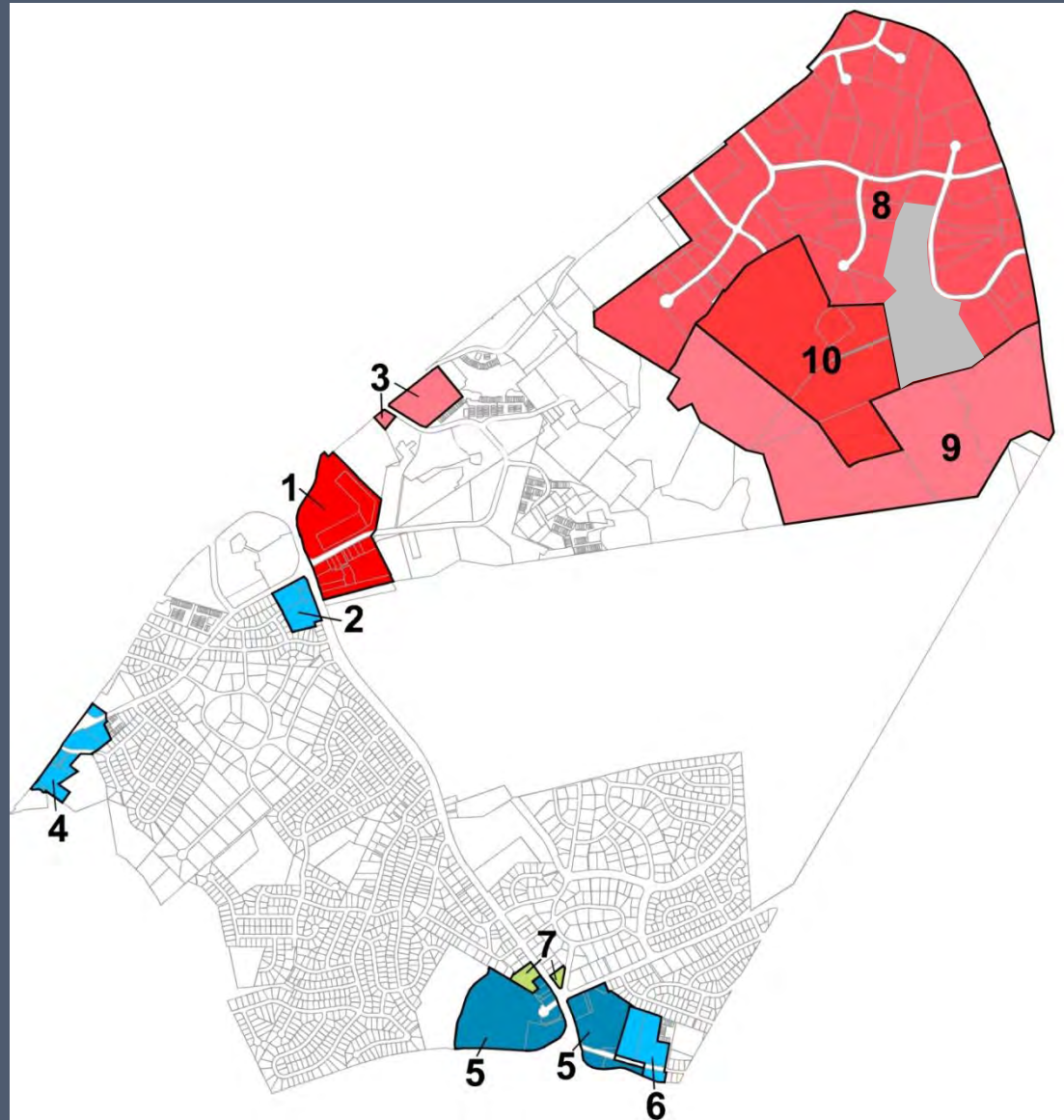
Propose New CR Zones for Existing Commercially Zoned Properties (C-1, C-2, C-4, C-6, C-O, C-T, O-M, I-1, I-2, I-3)

Maintain Current Zones for most Residentially Zoned Properties:

Single-Family (R-90)

Townhouse (RTs)

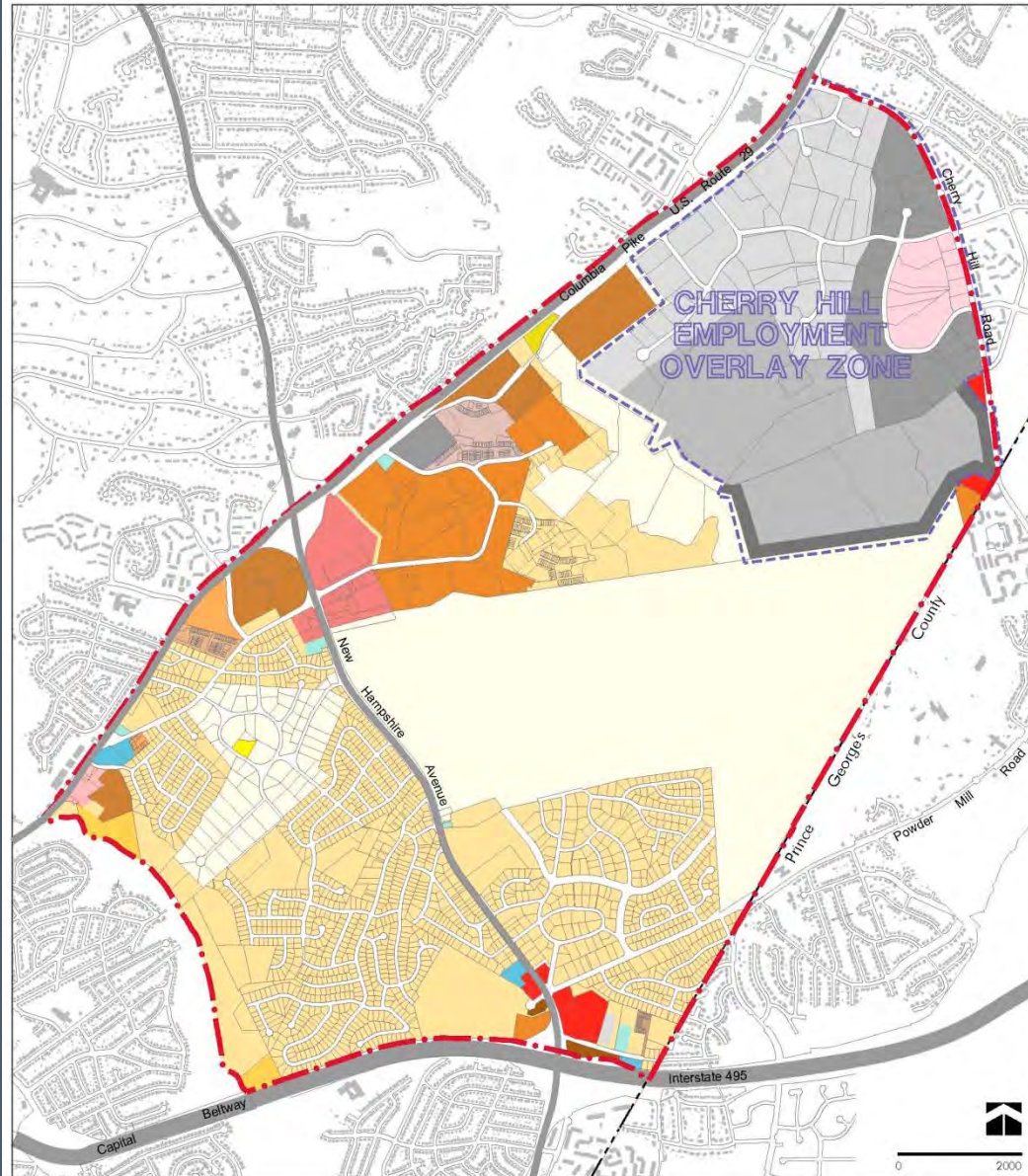
Multi-family (R-20, R-H)





# white oak science gateway master plan

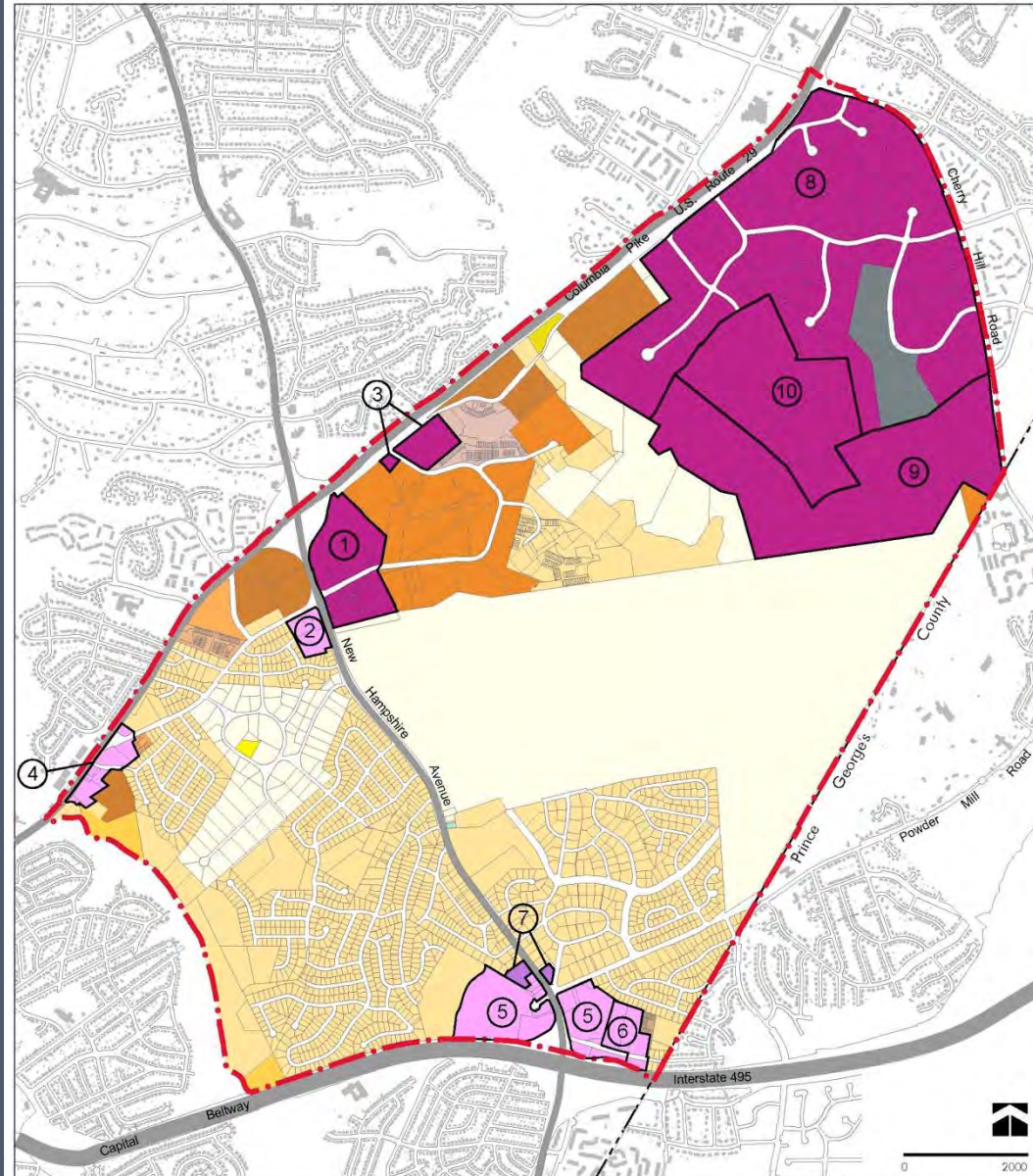
## Existing Zoning



- · - · - Master Plan Area Boundary
- County Boundary
- Overlay Zone Boundary
- RE-2 Residential Estate, 2 Acres
- RE-1 Residential Estate, 1 Acre
- R-200 Residential Estate, 1 Acre
- R-90 One-Family Detached Restricted Residential
- R-60 One-Family Detached Residential
- RT-6 Residential, Town House
- RT-8 Residential, Town House
- RT-10 Residential, Town House
- RT-12.5 Residential, Town House
- R-20 Multiple-Family Medium-Density Residential
- R-H Multiple-Family High-Rise Planned Residential
- O-M Office Building, Moderate Intensity
- C-O Commercial, Office Building
- C-T Commercial, Transitional
- C-1 Convenience Commercial
- C-2 General Commercial
- C-4 Limited Commercial
- C-6 Low-Density, Regional Commercial
- I-1 Light Industrial
- I-2 Heavy Industrial
- I-3 Technology and Business Park
- I-4 Low Intensity, Light Industrial

# white oak science gateway master plan

## Proposed Zoning



- Master Plan Area Boundary
  - County Boundary
- |         |   |
|---------|---|
| RE-2    | Residential Estate, 2 Acres                   |
| RE-1    | Residential Estate, 1 Acre                    |
| R-200   | Residential Estate, 1 Acre                    |
| R-90    | One-Family Detached Restricted Residential    |
| R-60    | One-Family Detached Residential               |
| RT-6    | Residential, Town House                       |
| RT-8    | Residential, Town House                       |
| RT-10   | Residential, Town House                       |
| RT-12.5 | Residential, Town House                       |
| R-20    | Multiple-Family Medium-Density Residential    |
| R-H     | Multiple-Family High-Rise Planned Residential |
| LSC     | Life Sciences Center                          |
- 
- |     |                                     |
|-----|-------------------------------------|
| CRN | Commercial Residential Neighborhood |
|-----|-------------------------------------|
- |   |         |        |        |      |
|---|---------|--------|--------|------|
| 7 | CRN-1.0 | C-0.75 | R-0.75 | H-45 |
|---|---------|--------|--------|------|
- |     |                             |
|-----|-----------------------------|
| CRT | Commercial Residential Town |
|-----|-----------------------------|
- |   |          |        |        |      |
|---|----------|--------|--------|------|
| 2 | CRT-1.5  | C-1.0  | R-0.75 | H-50 |
| 4 | CRT-0.75 | C-0.5  | R-0.25 | H-45 |
| 5 | CRT-1.5  | C-1.0  | R-1.0  | H-75 |
| 6 | CRT-1.0  | C-0.75 | R-0.75 | H-45 |
- |    |                        |
|----|------------------------|
| CR | Commercial Residential |
|----|------------------------|
- |    |         |        |        |       |
|----|---------|--------|--------|-------|
| 1  | CR-2.5  | C-1.5  | R-1.5  | H-200 |
| 3  | CR-1.0  | C-1.0  | R-0.75 | H-65  |
| 8  | CR-0.75 | C-0.75 | R-0.25 | H-75  |
| 9  | CR-0.75 | C-0.50 | R-0.50 | H-75  |
| 10 | CR-1.25 | C-1.0  | R-0.25 | H-200 |

**PRELIMINARY RECOMMENDATIONS  
FOR THE  
WHITE OAK / FDA CENTER**

# white oak science gateway master plan

## White Oak / FDA Center



# white oak science gateway master plan

## FDA Headquarters at White Oak Federal Research Center (FRC)



   
**FDA**  
U.S. Department of  
Health and Human Services  
Food and Drug Administration

# white oak science gateway master plan

## FDA Headquarters at White Oak Federal Research Center

Construction of FDA Started in 2001

Campus Planned for 6 million SF  
Completed 4.5 million SF

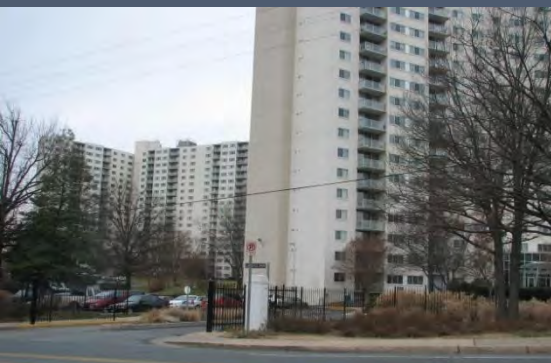
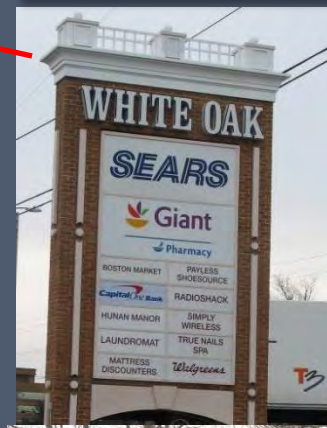
5,500 employees currently

9,000 employees at build-out

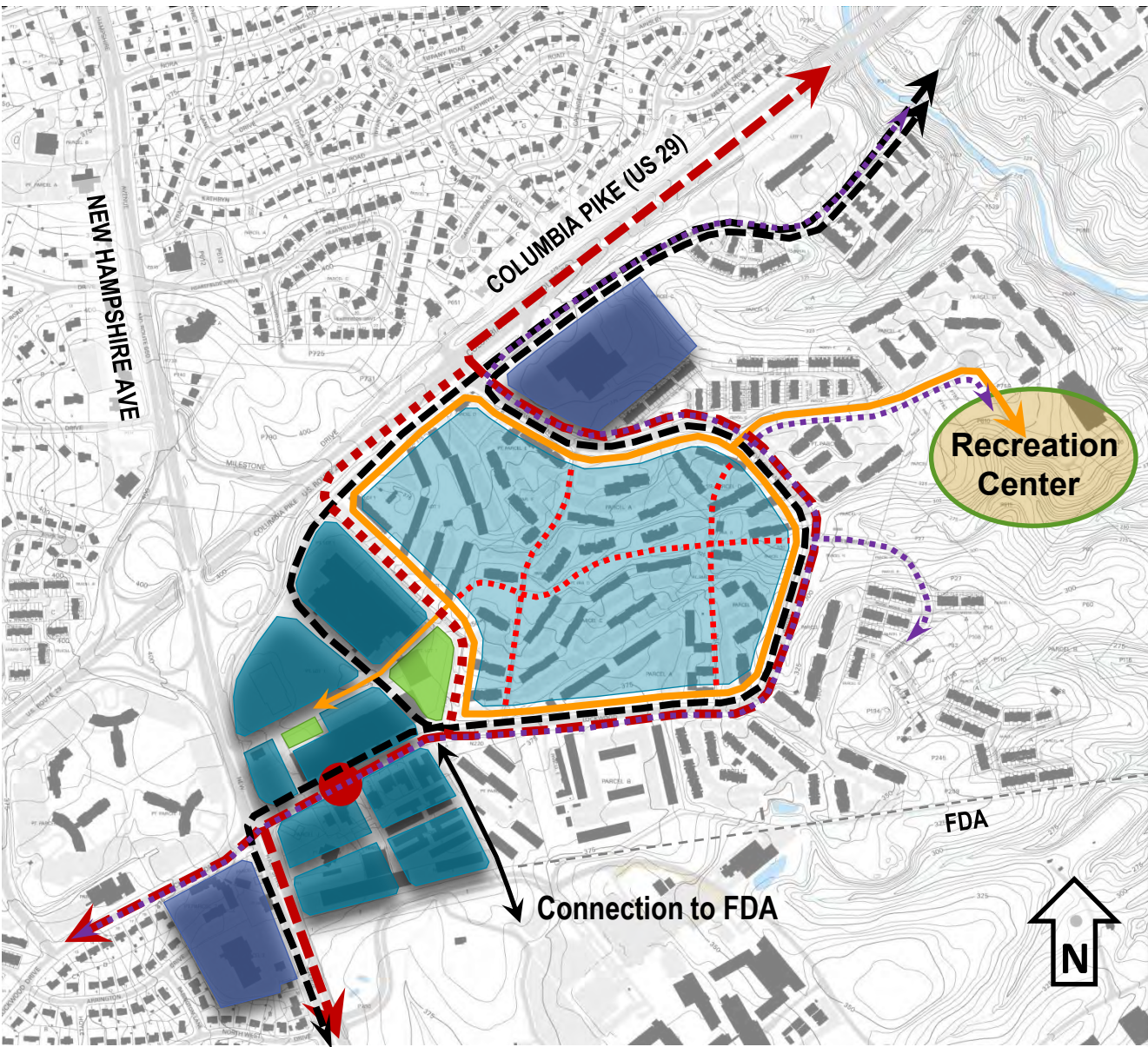


# white oak science gateway master plan

## White Oak / FDA Center



# white oak science gateway master plan



- Proposed BRT
- Proposed BRT Station
- Alternate BRT Alignment
- Existing Road
- Conceptual Road
- Connection to FDA
- Proposed Circulator
- Off-road hiker-biker trail
- Mixed-use development
- Transitional development
- Potential re-development
- Potential Open Space



*\* illustrative is for analysis only – not intended as development recommendations*

**White Oak/FDA Center**

# white oak science gateway master plan

## White Oak Shopping Center

- Increase tree canopy cover to 30%
- Minimize surface parking and impervious cover through shared and/or structured parking
- Integrate stormwater management with redevelopment



*\* Illustrative is for analysis only – not intended as development recommendations*

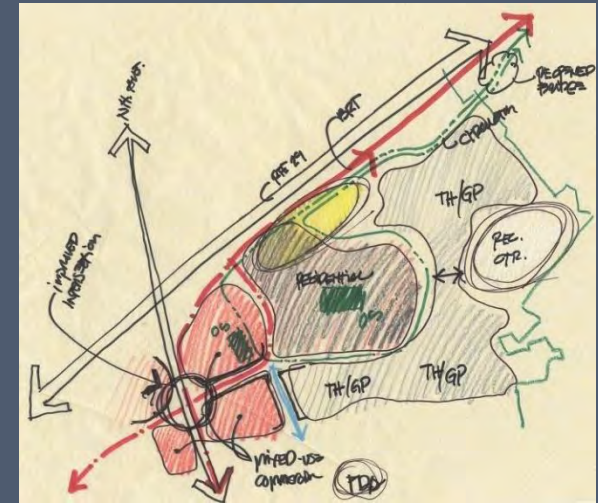
area diagram

# white oak science gateway master plan

## Parks & Open Space - Preliminary Recommendations

### White Oak Center

- **A plaza near BRT station** – approximately  $\frac{3}{4}$  acres in size, owned and managed by the private sector, in the core of a redeveloped White Oak shopping center to serve as a public gathering place near a transit stop and a focus of commercial activity
- **A Neighborhood Green Urban Park** – approximately two acres in size, for a variety of activities including picnicking, pick up sports, and relaxing on the lawn



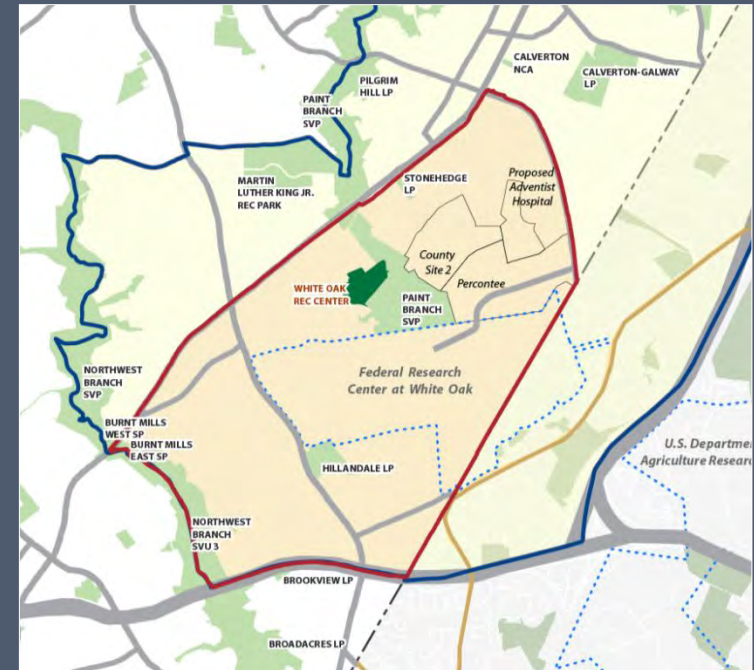
# white oak science gateway master plan

## Parks & Open Space - Preliminary Recommendations

### FDA's Recreation and Open Space

#### Employee Facilities and Programs

- Fitness center – 10,000sf
- Picnic areas throughout
- Landscaped central commons
- Walking path
- Soccer / Softball field
- Bicycle lockers, showers
- Clubs: softball, soccer, tennis, basketball, bowling, flag football, kickball, volleyball
- Bicycle commuter group
- Farmers market

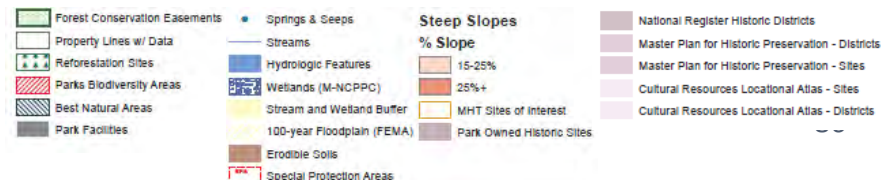
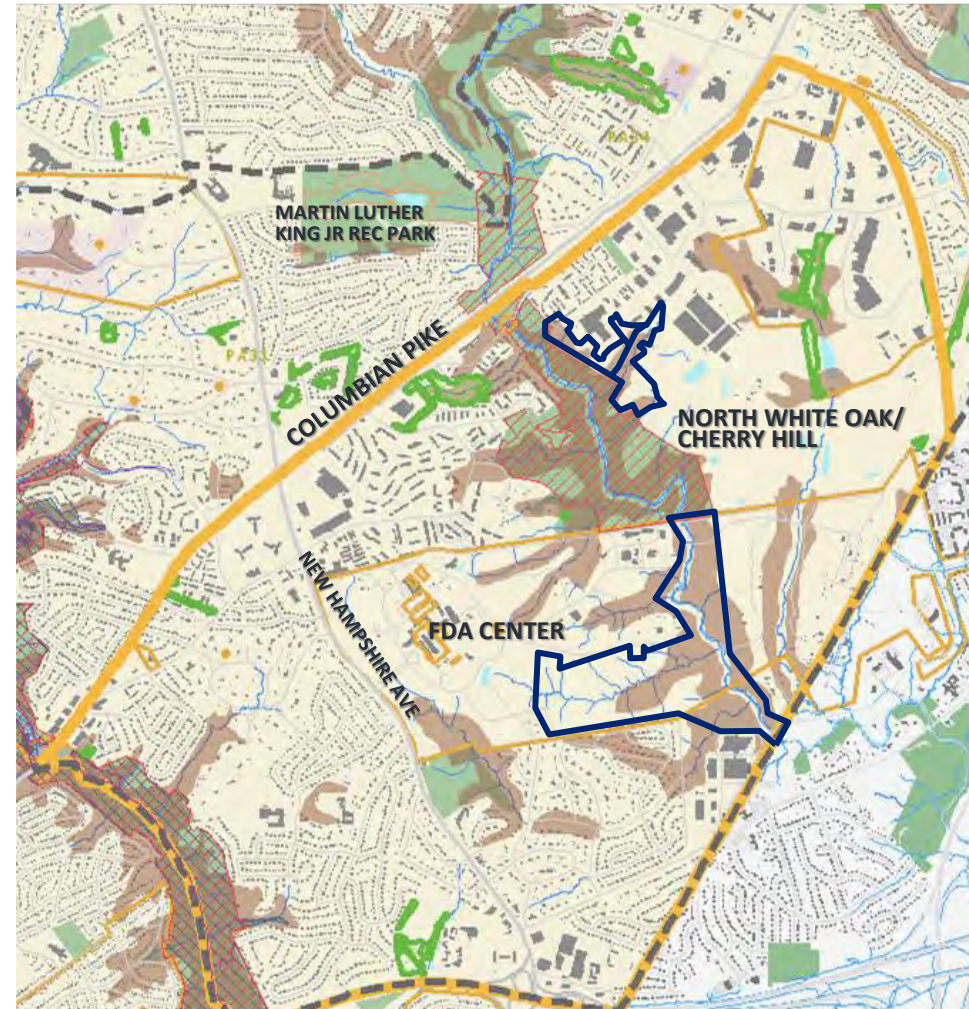


# white oak science gateway master plan

## Parks & Open Space - Preliminary Recommendations

### White Oak Center

- Bikeways, sidewalks, and shared use path loops to connect to White Oak Recreation Center to the east, Martin Luther King Recreational Park to the north, FDA Center, Hillandale Local Park, and Hillandale Center area to the south
- 130-acre Natural Resource Legacy Open Space site designation along Paint Branch Stream Valley, if Federal Research Center were ever surplus



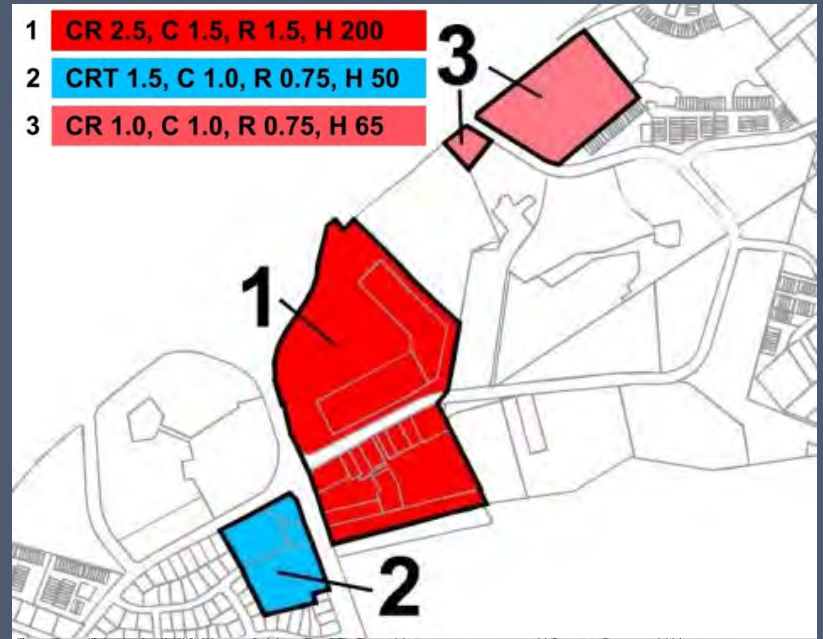
# white oak science gateway master plan

## White Oak Center Preliminary Zoning Recommendations

### Existing Zoning



### Proposed Zoning



# white oak science gateway master plan

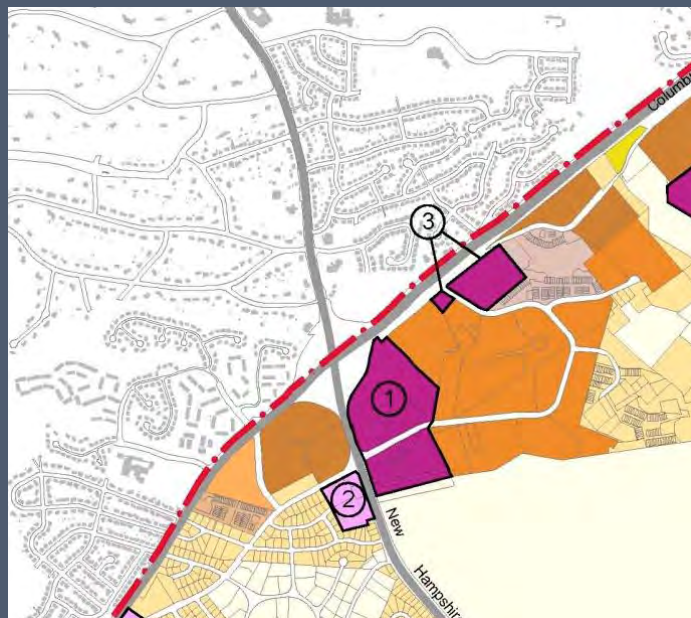
## White Oak Center Preliminary Zoning Recommendations

### Existing Zoning



R-20	Multiple-Family Medium-Density Residential
R-H	Multiple-Family High-Rise Planned Residential
O-M	Office Building, Moderate Intensity
C-O	Commercial, Office Building
C-T	Commercial, Transitional
C-1	Convenience Commercial
C-2	General Commercial
C-4	Limited Commercial
C-6	Low-Density, Regional Commercial
I-1	Light Industrial
I-2	Heavy Industrial
I-3	Technology and Business Park

### Proposed Zoning



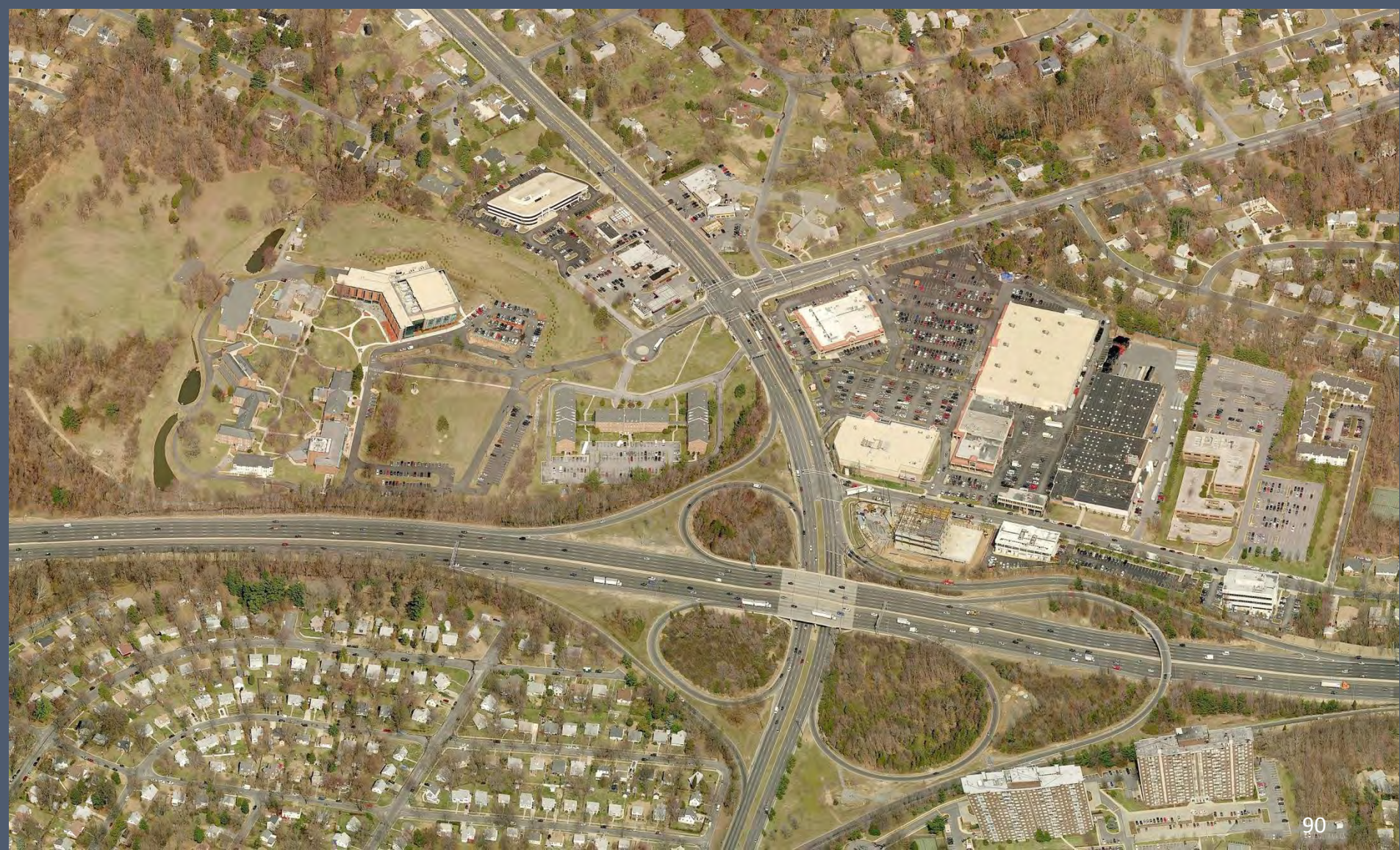
### Commercial-Residential Zones

1	CR-2.5	C-1.5	R-1.5	H-200
2	CRT-1.5	C-1.0	R-0.75	H-50
3	CR-1.0	C-1.0	R-0.75	H-65

**PRELIMINARY RECOMMENDATIONS  
FOR THE  
HILLANDALE COMMUNITY**

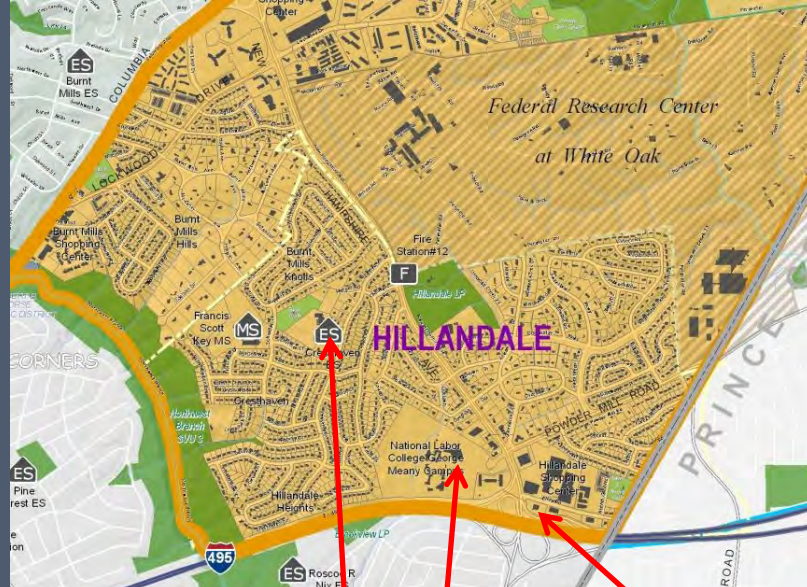
# white oak science gateway master plan

## Hillandale Community

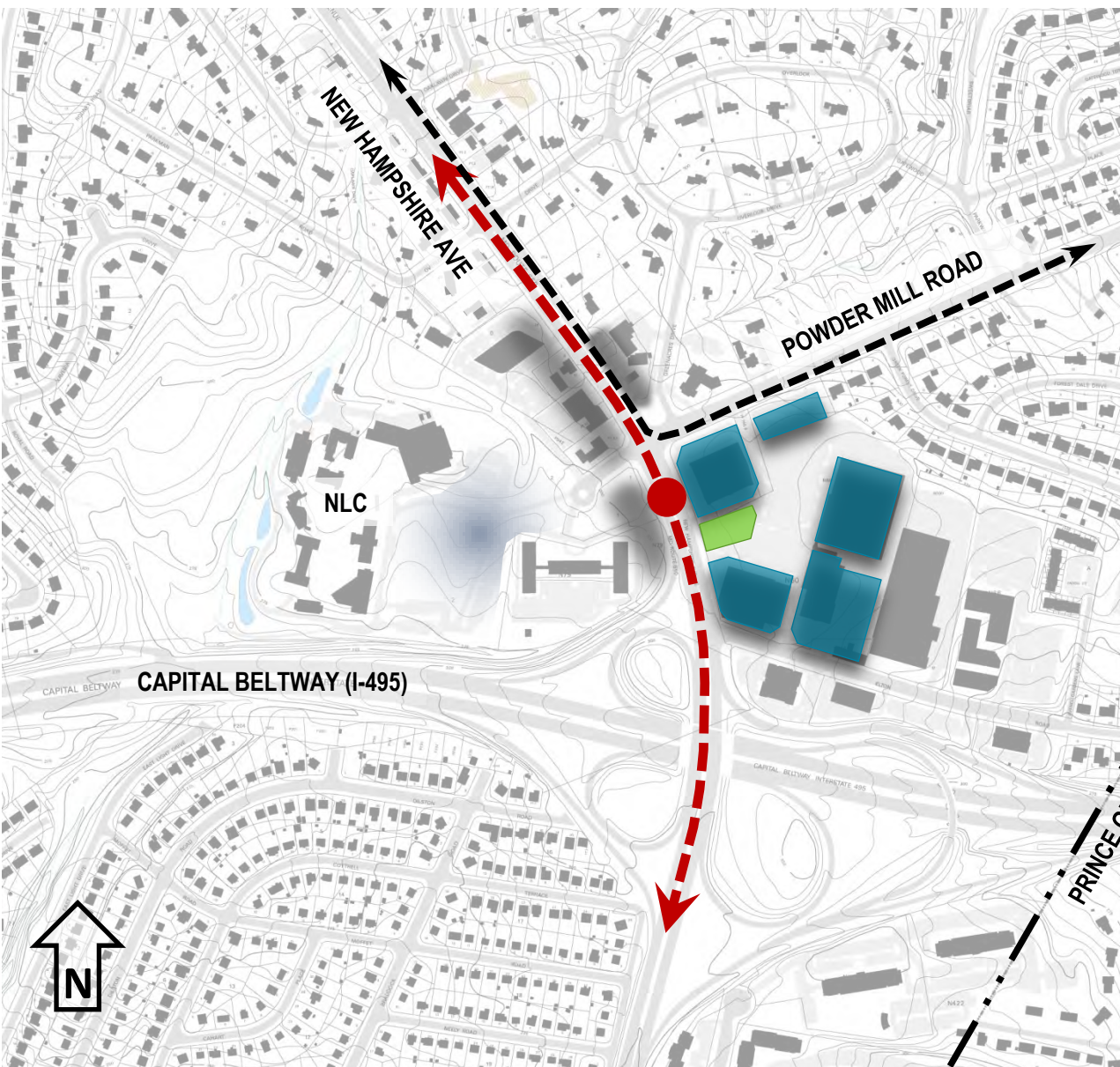


# white oak science gateway master plan

## Hillandale Community



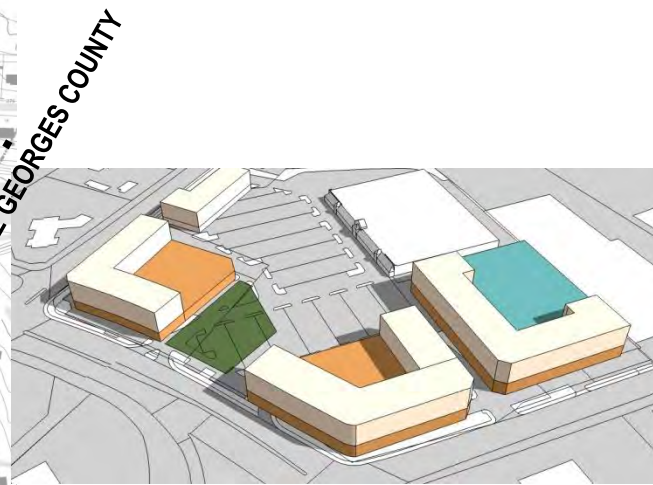
# white oak science gateway master plan



- Proposed BRT
- Proposed BRT Station

- Proposed Circulator

- Mixed-use Development
- Potential Re-development
- Potential Open Space



# white oak science gateway master plan



## National Labor College

- Investigate options for daylighting and restoring stream running through the property center.
- Maximize and enhance forest retention as a buffer to surrounding single-family communities.

*\* illustrative is for analysis only – not intended as development recommendations*

**area diagram**

# white oak science gateway master plan

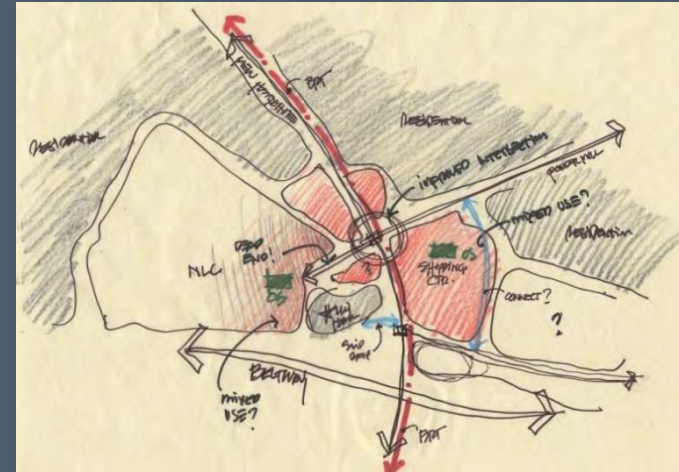
## Parks & Open Space - Preliminary Recommendations

### Hillandale

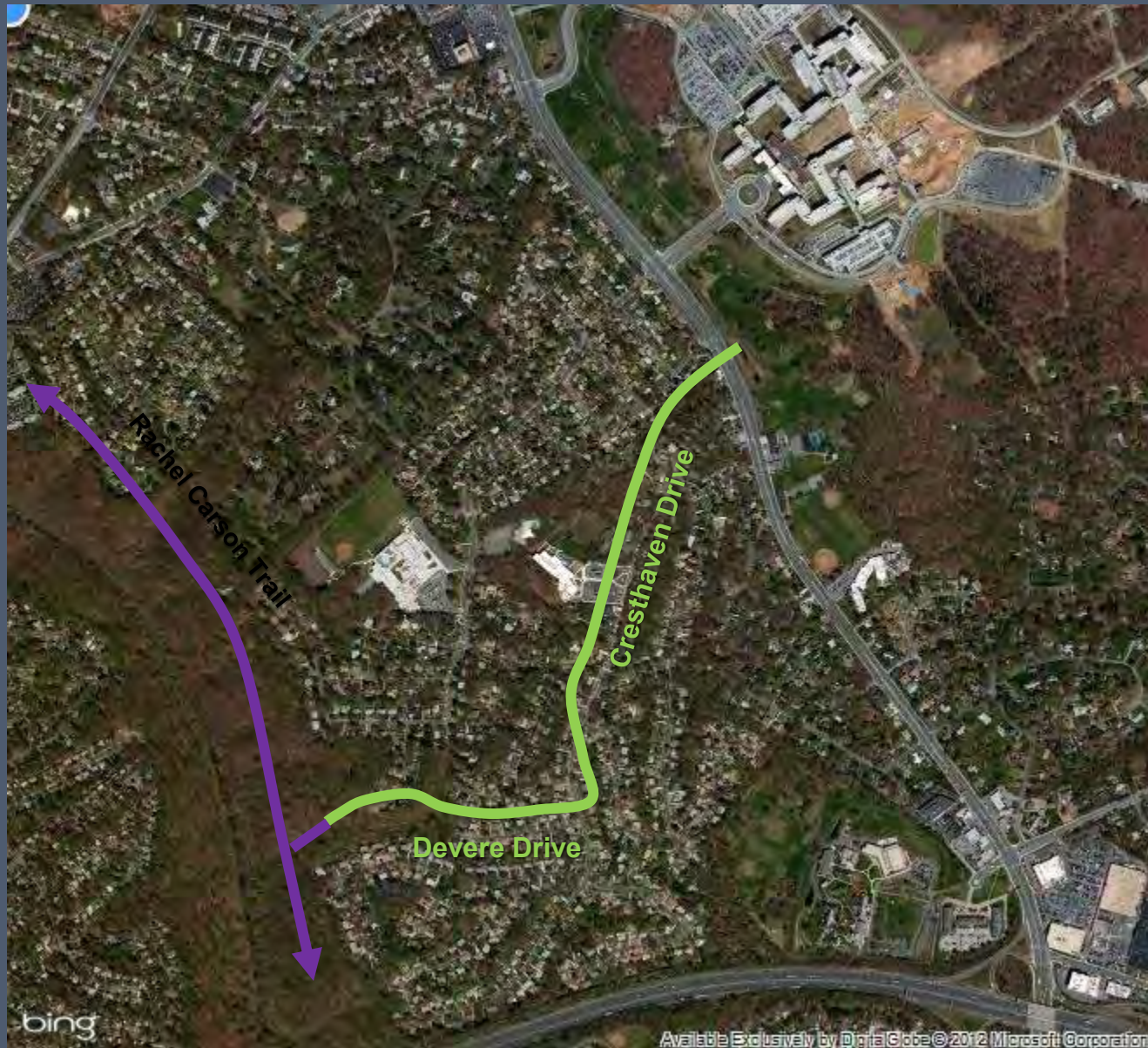
If the Hillandale Shopping Center redevelops – an urban plaza, approximately ½ acre in size, to be owned and managed by the private sector

### Hillandale Local Park

- Upon Planning Board review and approval (as part of a Department of Parks agenda item), remove the Park Activity Building, which has a failing septic system and is underutilized
- Renovate/repurpose with facilities that are in demand, such as community open space, reconfigured play areas, and natural surface trail connecting to neighborhood to the south and east, through currently funded Facility Plan



# white oak science gateway master plan



# white oak science gateway master plan

## Hillandale Preliminary Zoning Recommendations

Existing Zoning

Proposed Zoning



- 5 CRT 1.5, C 1.0, R 1.0, H 75
- 6 CRT 1.0, C 0.75, R 0.75, H 45
- 7 CRN 1.0, C 0.75, R 0.75, H 45



Planning Board Presentation  
White Oak Science Gateway  
Master Plan  
Preliminary Recommendations  
September 27, 2012

<http://montgomeryplanning.org/community/wosg/index.shtm>

Nancy Sturgeon, Lead Planner

[www.nancy.sturgeon@montgomeryplanning.org](http://www.nancy.sturgeon@montgomeryplanning.org)

September 20 Presentation covered:

**Area, Outreach, Schedule, Plan Development/Overview, Vision**

## **Overview of Areawide Preliminary Recommendations**

- Natural Environment
- Parks, Open Spaces, Recreation
- Mobility and Connectivity
- Historic Resources

## **Overview of Centers: White Oak/FDA Center and Hillandale Community**

- Existing Conditions
- Illustrative Concept
- Environment
- Parks and Open Space
- Zoning Recommendations

September 27 Presentation covered:

## **Burnt Mills Community**

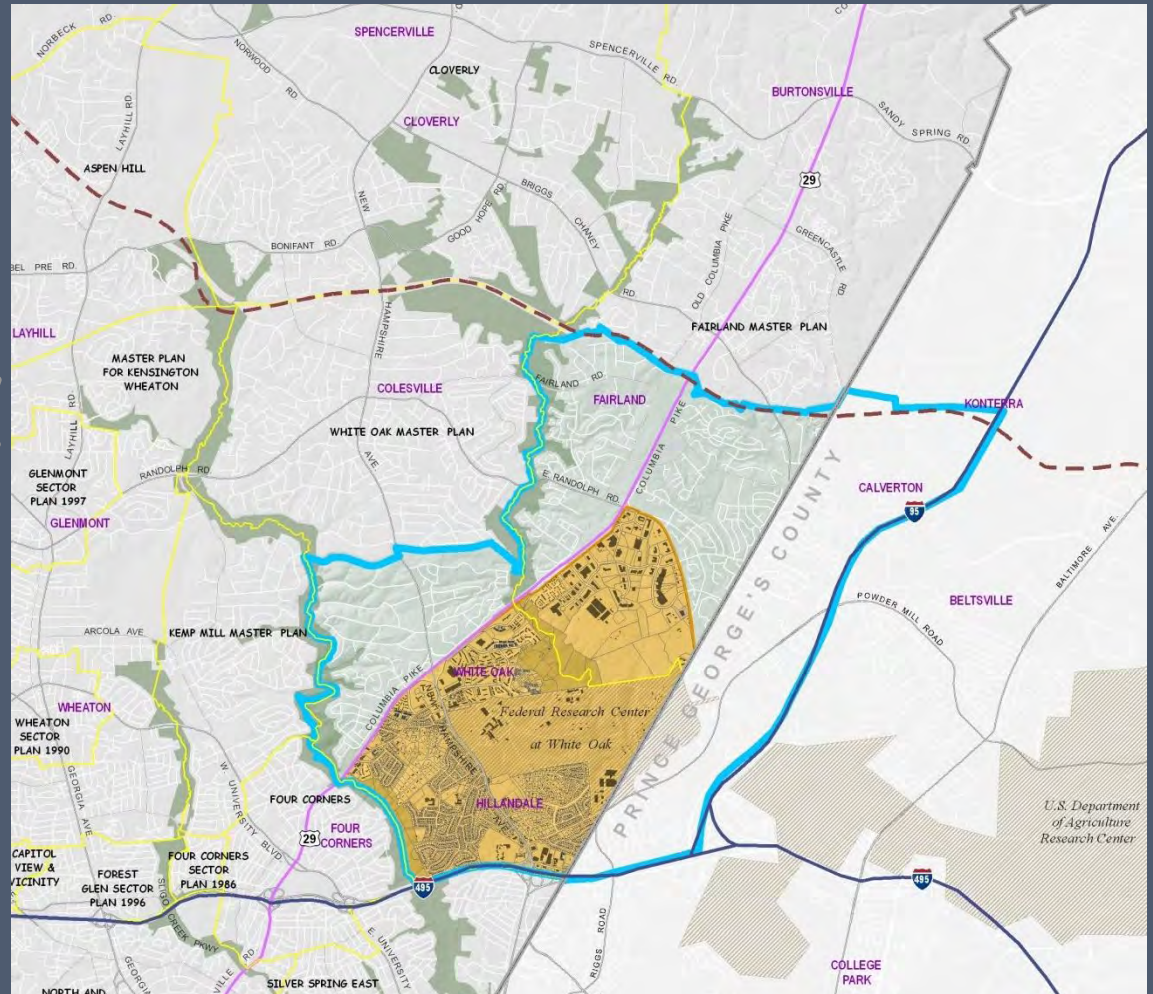
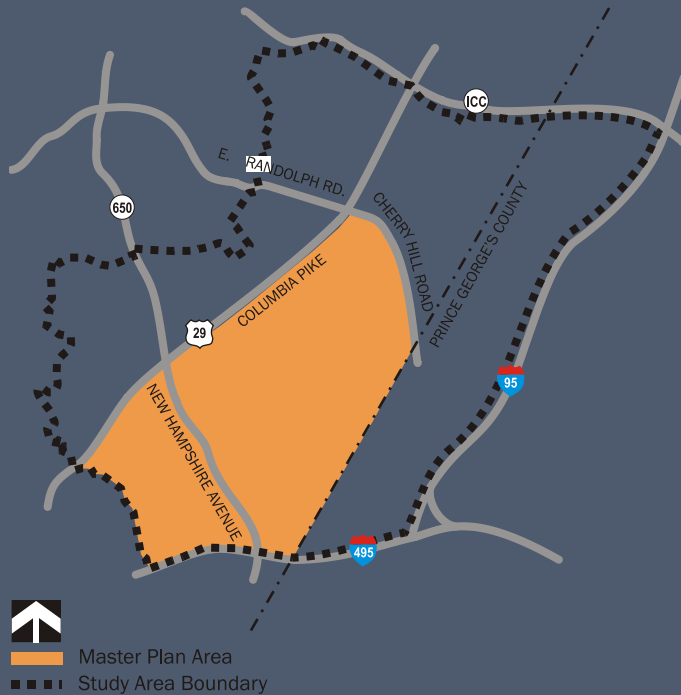
### **Overview of North White Oak/Cherry Hill Road Center**

- Existing Conditions
- Illustrative Concept
- Environment
- Parks and Open Space
- Zoning Recommendations

### **Overview of Staging**

# white oak science gateway master plan

## Boundaries: Master Plan Area and Study Area



# white oak science gateway master plan

## Preliminary Recommendations

### Zoning Approach:

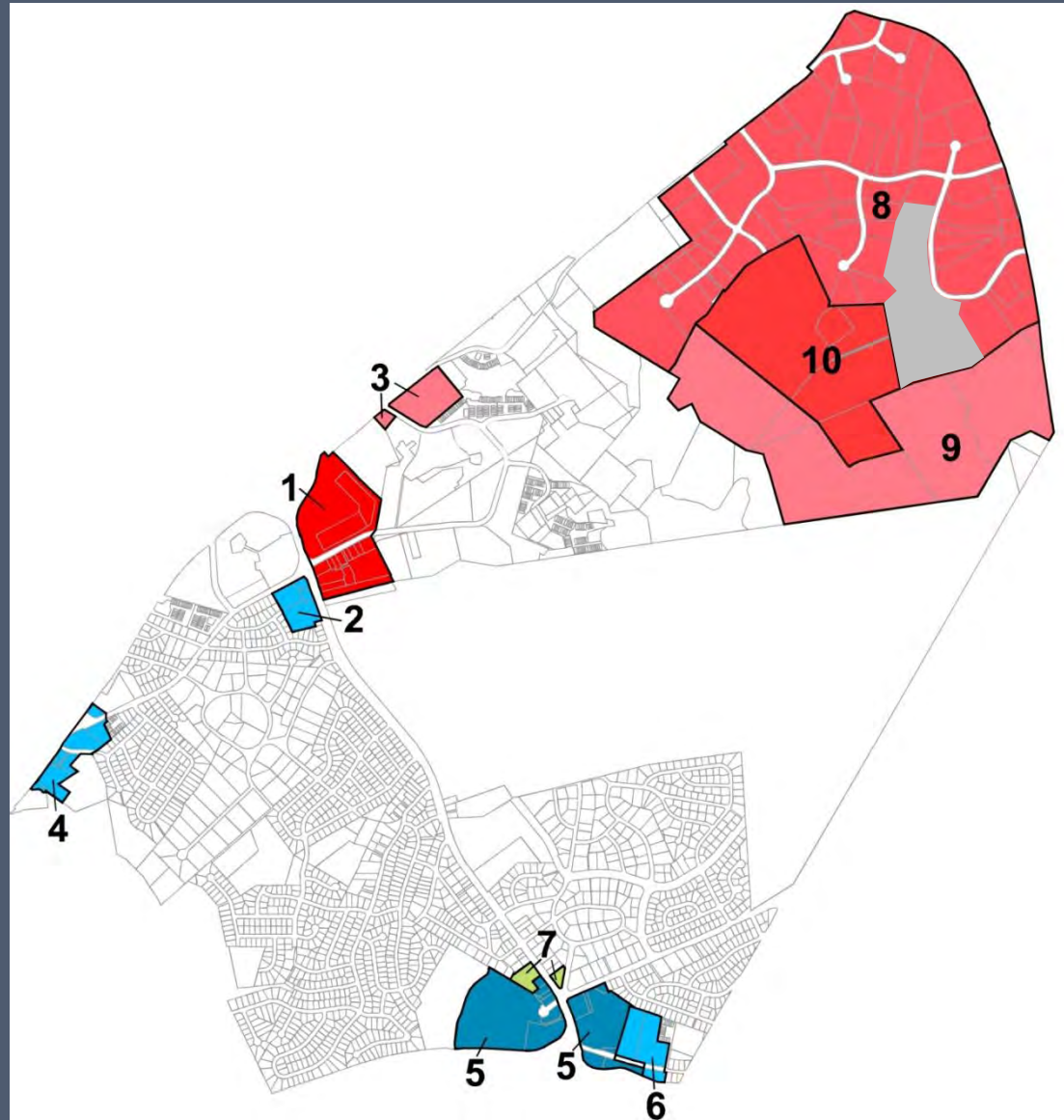
Propose New CR Zones for Existing Commercially Zoned Properties (C-1, C-2, C-4, C-6, C-O, C-T, O-M, I-1, I-2, I-3)

Maintain Current Zones for most Residentially Zoned Properties:

Single-Family (R-90)

Townhouse (RTs)

Multi-family (R-20, R-H)

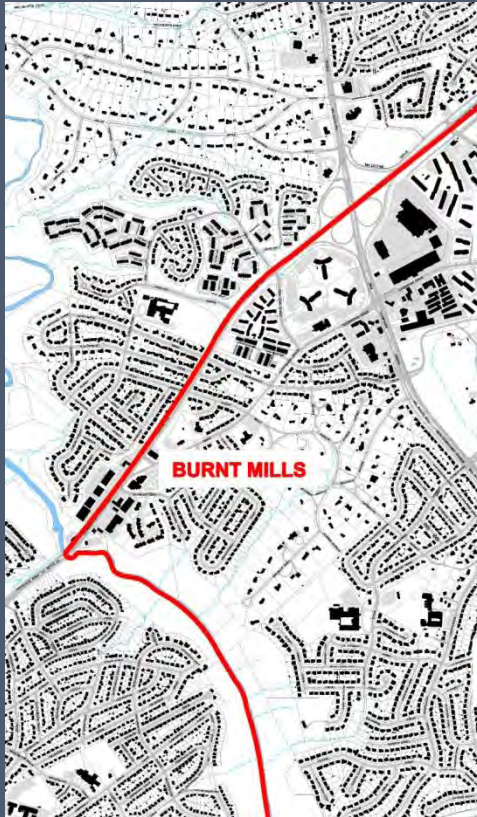




**PRELIMINARY RECOMMENDATIONS  
FOR THE  
BURNT MILLS COMMUNITY**

# white oak science gateway master plan

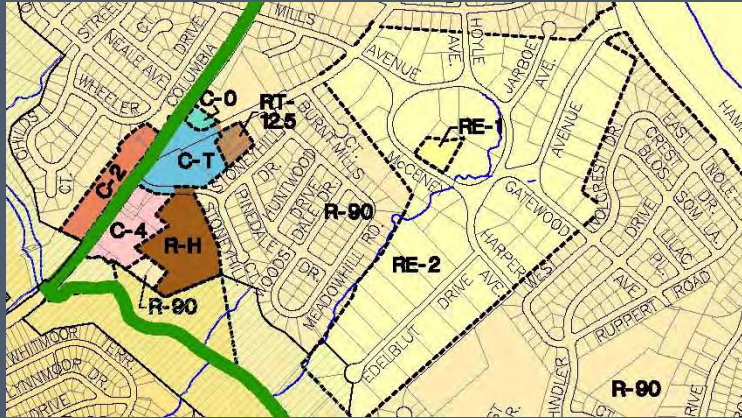
## Burnt Mills Community



# white oak science gateway master plan

## Burnt Mills Community

Existing Zoning



Proposed Zoning



Commercial-Residential Zone  
4 CRT-0.75 C-0.5 R-0.25 H-45



# white oak science gateway master plan

## Parks & Open Space- Preliminary Recommendations

### Burnt Mills

#### Robert Morse Filtration Plant Buildings (formerly WSSC)

- Activate through a “directed partnership”, investing in the adaptive reuse of the structures and in improvements to environmental conditions in Northwest Branch
- Coordinate with Historic Preservation Commission since the buildings are designated on the Master Plan for Historic Preservations and with the Maryland Department of Environment due to the dam and potential stream restoration



**PRELIMINARY RECOMMENDATIONS**

**FOR THE**

**NORTH WHITE OAK / CHERRY HILL ROAD CENTER**

# white oak science gateway master plan

## North White Oak-Cherry Hill Road Center



# east county science center master plan

## North White Oak/Cherry Hill Road Center

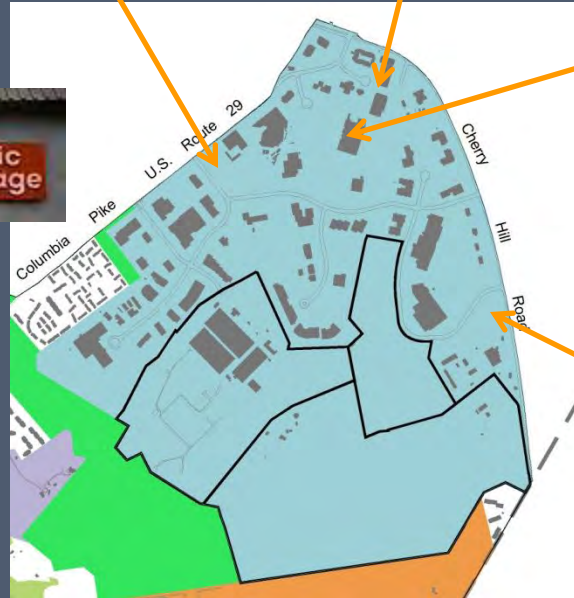
### Existing Commercial Office Uses



# white oak science gateway master plan

## North White Oak/Cherry Hill Road Center

### Existing Retail Uses

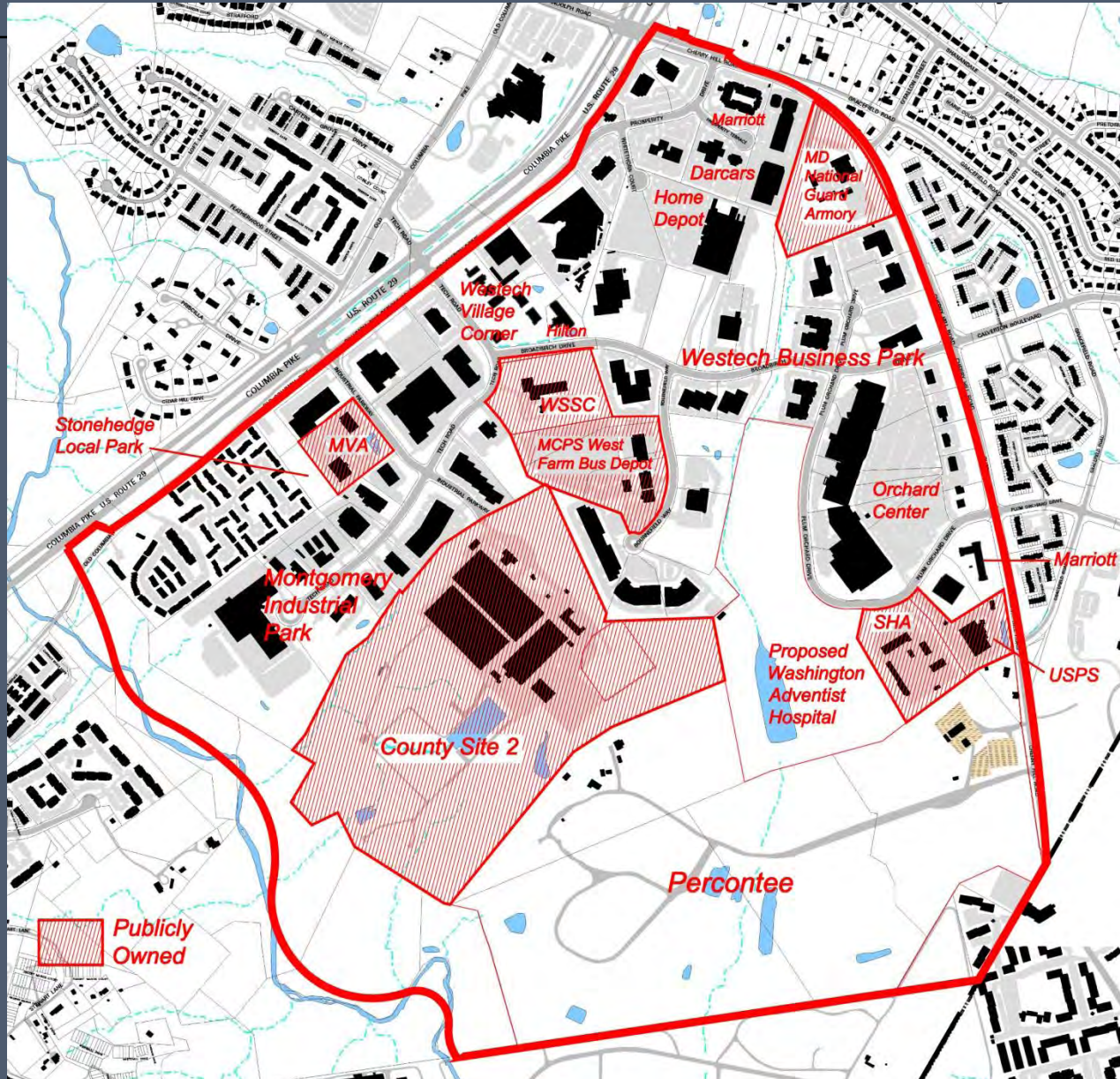


# white oak science gateway master plan

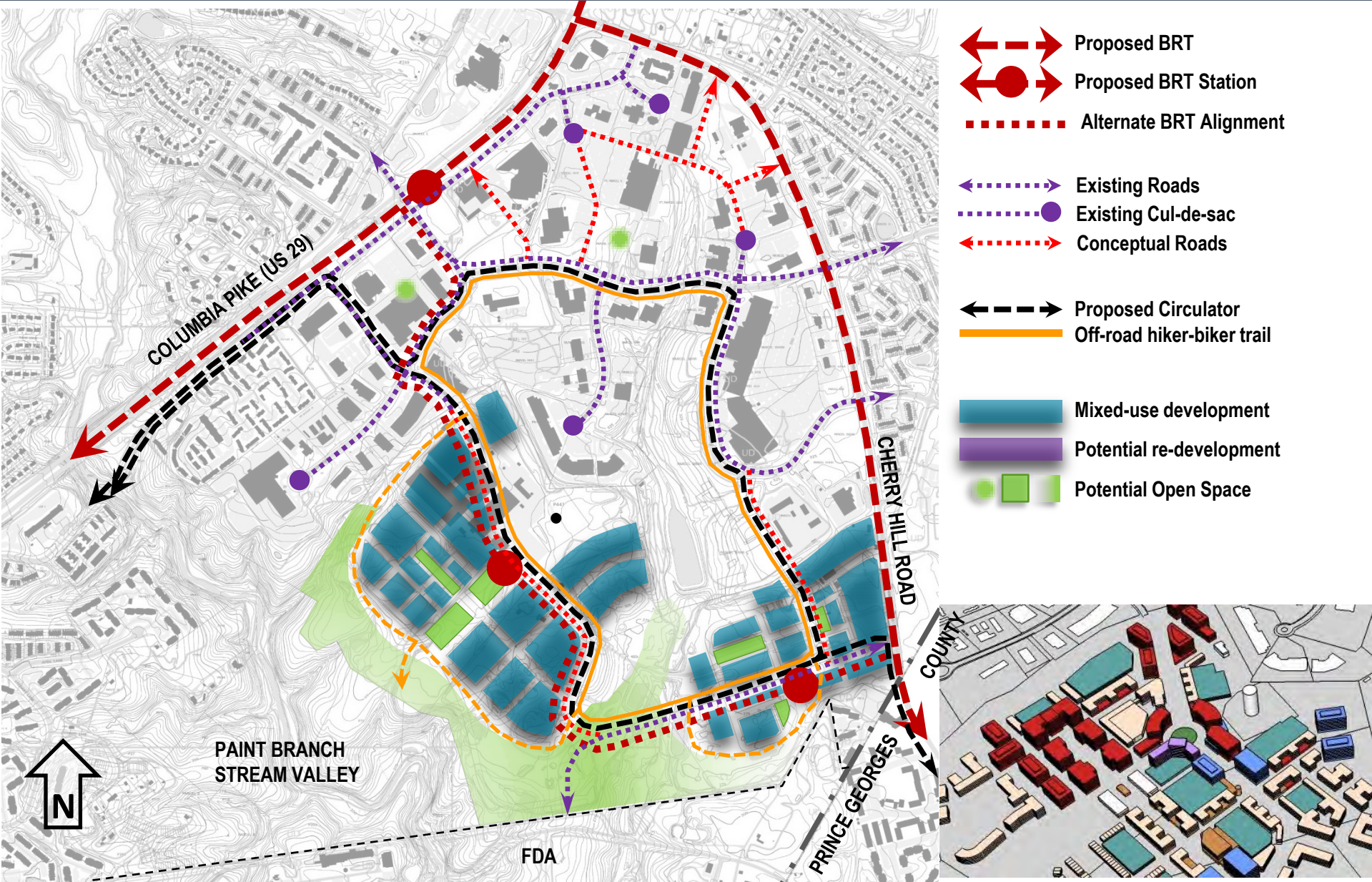
## New Development Potential: Site 2, Percontee, WAH



# white oak science gateway master plan



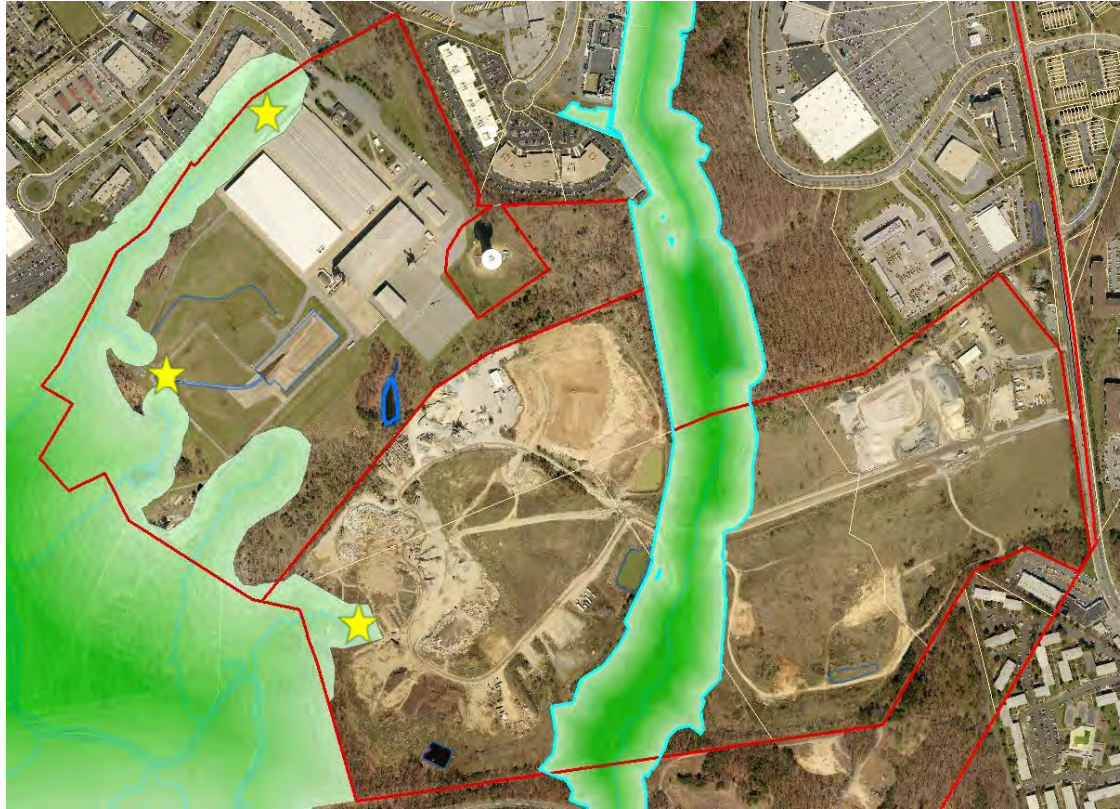
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*\* illustrative is for analysis only – not intended as development recommendations*

North white oak | cherry hill

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## Percontee and Site II

- Use existing stream crossings to develop circulation system.
- Restore and protect streams and buffers, while still allowing non-motorized access and visibility.
- Work with WSSC to ensure adequate sewer volume at time of development. Minimize disturbance in Paint Branch and investigate option of extending the sewer line in Cherry Hill Road.
- Development should be oriented to maximize exposure to the natural environment while minimizing disturbance of steep slopes, buffers and retaining forest.

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## Parks & Open Space- Preliminary Recommendations

### North White Oak/Cherry Hill Road Center

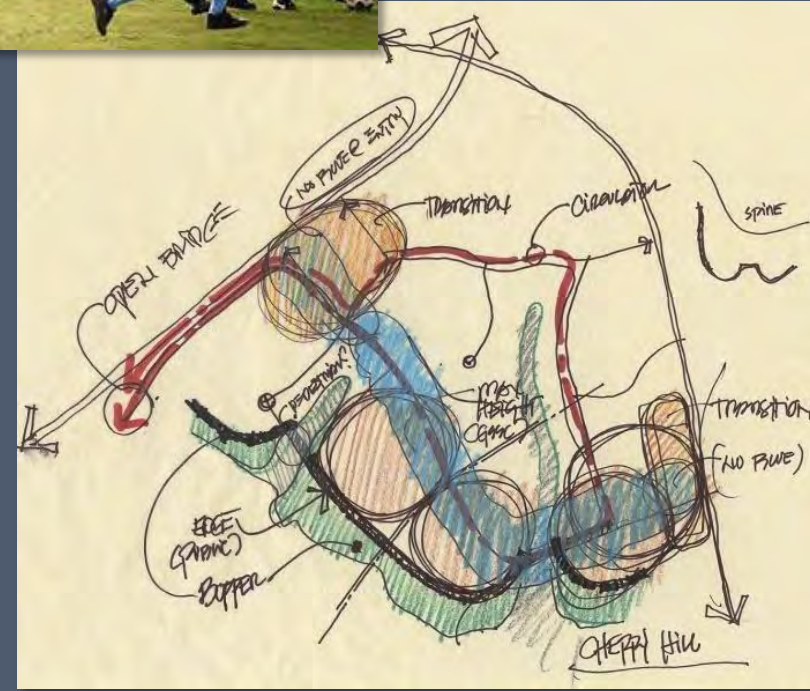
#### A Central Civic Green Urban Park

- Approximately 1 acre in size
- To be owned by M-NCPPC Department of Parks
- A gathering space for community events, meeting friends
- A focal point in the highest density cluster of retail and residential uses, a “town center.”



#### An active Local Park

- To be owned by M-NCPPC department of parks
- One to two large adult-sized rectangular athletic fields, consider synthetic turf and lighting
- Popular amenities such as a community garden, dog park, basketball courts, community open space, urban wooded areas, and play areas.
- Provide some on-street parking
- Consider synthetic turf and lighting
- Co-locate with school, if one is to be provided, to create efficiencies in field use, parking, and infrastructure



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## Parks & Open Space- Preliminary Recommendations

### North White Oak/Cherry Hill

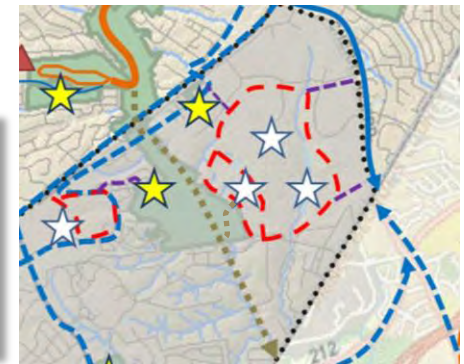
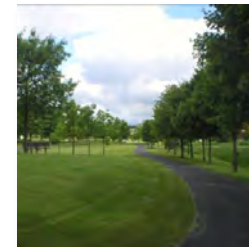
Privately owned and managed neighborhood greens for each neighborhood

- Open lawn areas, shaded seating, and play structures, community gardens, dog parks, etc.
- 20-acre Natural Resource Legacy Open Space site designation along eastern edge Paint Branch Stream Valley at time of regulatory review



### Integrated Trail and Bikeway System

- Outside of environmentally sensitive areas, connecting destinations throughout the development.
- Additions to parkland to allow for trails and bikeways along eastern edge of Paint Branch Stream Valley to be determined at time of regulatory review
- Bikeways/Shared use paths along streets and hard surface trails on expanded parkland or public use areas
- Connections to White Oak Center via Old Columbia Pike
- Connections to proposed walking path around regional storm water pond on the proposed Washington Adventist Hospital site
- Multi-use natural surface trail connecting to Martin Luther King Recreational Park from the plan area



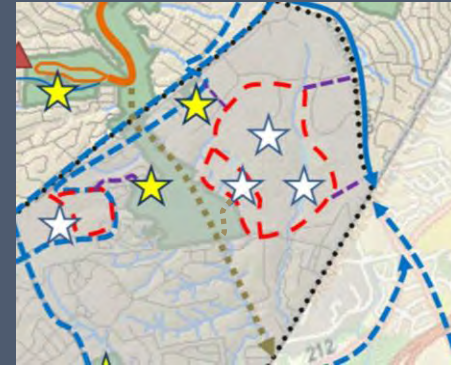
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## Parks & Open Space- Preliminary Recommendations

### North White Oak/Cherry Hill

Natural Surface Trailhead at eastern edge of Paint Branch Stream Valley Park

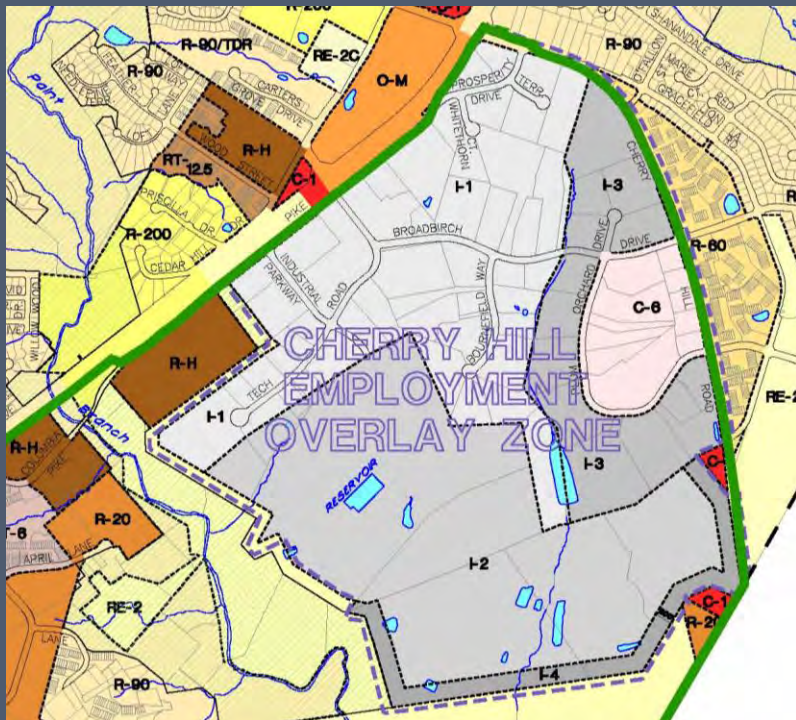
- Picnic tables, interpretive signage, trail to the stream along the old roadbed
- Additional parkland may be needed at time of regulatory review



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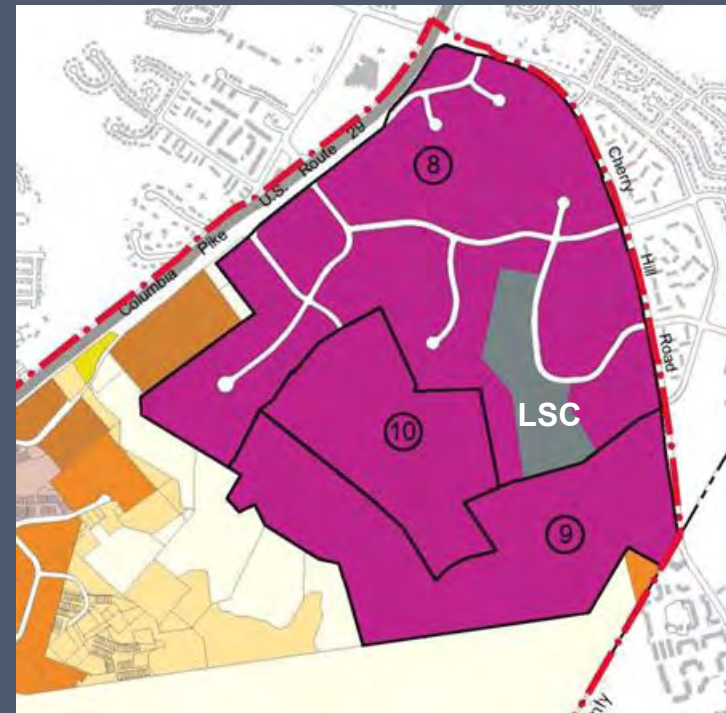
## North White Oak/Cherry Hill Road Preliminary Zoning Recommendations

### Existing Zoning



- I-1 Light Industrial
- I-2 Heavy Industrial
- I-3 Technology and Business Park
- C-6 Low-Density, Regional Commercial
- C-1 Convenience Commercial

### Proposed Zoning



- Commercial-Residential Zones
- 8 CR-0.75 C-0.75 R-0.25 H-75
- 9 CR-0.75 C-0.5 R-0.5 H-75
- 10 CR-1.25 C-1.0 R-0.25 H-200

**AREAWIDE PRELIMINARY RECOMMENDATIONS**

**OVERVIEW OF**

**STAGING**

# white oak science gateway master plan

## Preliminary Recommendations: Staging

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- Transforming White Oak requires a transit and road network that will support increased densities over time.
- Staging addresses the timing of development vis-à-vis the infrastructure needed to support it.
- Plan provides stages and amounts of development tied to infrastructure and transportation improvements.

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## Plan Development

	Existing	Existing & Approved	2040 COG (adjusted)	2012 Master Plan Scenario
Commercial (sf)	11,187,298	12,000,000	15,854,064	25,434,851
Single-Family DUs	2,260	2,260	2,404	2,785
Multi-Family DUs	<u>4,858</u>	<u>4,858</u>	<u>5,194</u>	<u>12,903</u>
Total Dwelling Units	7,118	7,118	7,598	15,688
Jobs	27,688	31,168	40,063	70,312
MP J/H ratio	3.8/1	4.3/1	5.2/1	4.4/1
SA J/H ratio	1.6/1			



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Stage 1	Stage 2	Stage 3
4 million SF Commercial/ Residential	5 million SF commercial 2000 dwelling units (DUs)	4 million SF commercial DUs allowed by zoning
Prerequisites to Stage 1	Prerequisites to Stage 2	Prerequisites to Stage 3
Approve SMA	Fund US 29 BRT OR	US 29 BRT operational
Develop Monitoring Program & Appoint Implementation Advisory Committee	Fund New Hampshire Ave. BRT OR Program Needed Transportation Improvements	Fund New Hampshire Ave BRT if not done in Stage 2  Program Needed Transportation Improvements
Expire Trip Mitigation		
Create New Policy Area	Raise Policy Area CLV Standard	Attain 30% NADMS
Document NADMS	Establish White Oak TMD	

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## Staging

**Stage 1:** 4 million square feet of approved new development allocated as follows:

**White Oak Center:**

Up to 1.5 million SF for either residential or commercial

**Hillandale Community:**

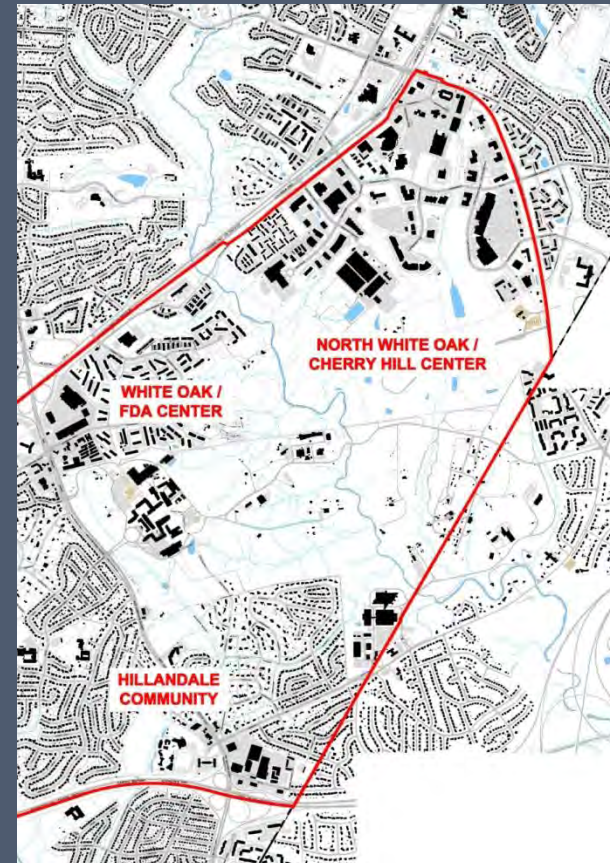
Up to 1.5 million SF for either residential or commercial

**North White Oak/Cherry Hill Road Center:**

Up to 3 million SF of commercial or a combination of commercial and residential with residential limited to a maximum of 1 million SF

*Density allocated at building permit.*

*Planning Board may revise geographic allocations based on how development activity proceeds.*



# white oak science gateway master plan

## Upcoming Master Plan Schedule

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### 2012

**Sept. 20 & 27**      **Preliminary Recommendations to Planning Board**

November 29  
(tentative)      Staff Draft and Urban Design Guidelines Presented to the  
Planning Board; public hearing date requested

### 2013

January 17  
(tentative)      Planning Board Public Hearing

February-June      Planning Board Worksessions

July      Transmit Plan to County Council and County Executive

October      County Council Public Hearing

October-Dec.      PHED Committee and full Council Worksessions

### 2014

Jan. - March      Sectional Map Amendment (Zoning Process)

Thanks for your time and attention!