



Rock Spring Master Plan

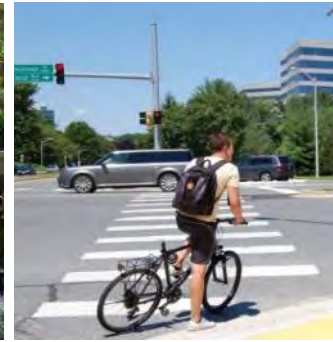
Community Meeting #5

February 25, 2016

M-NCPPC

Montgomery County Planning Department

montgomeryplanning.org



Meeting Agenda

- 7:00 Welcome**
- 7:05 Meeting Format + Next Steps**
- 7:15 Parks, Trails and Open Spaces**
- 8:00 Transportation Modeling Overview**
- 8:30 Transportation Planning in Rock Spring**
- 9:00 Conclude**

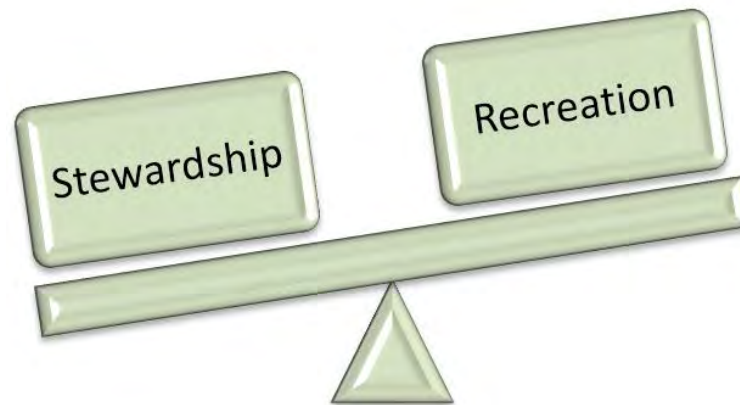
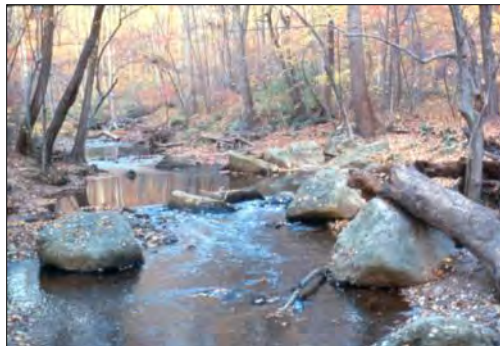
Rock Spring Master Plan Parks, Trails, and Open Spaces

M-NCPPC Montgomery Parks
Parks, Trails, and Open Spaces in the Rock Spring Master Plan
Brooke Farquhar, Supervisor, Park and Trail Planning
Susanne Paul, Park Planner
Thursday, January 28, 2015



M-NCPPC Montgomery Parks Mission:

“Protect and interpret our valuable natural and cultural resources; balance the demand for recreation with the need for conservation; offer a variety of enjoyable recreational activities that encourage healthy lifestyles; and provide clean, safe, and accessible places for leisure-time activities.”

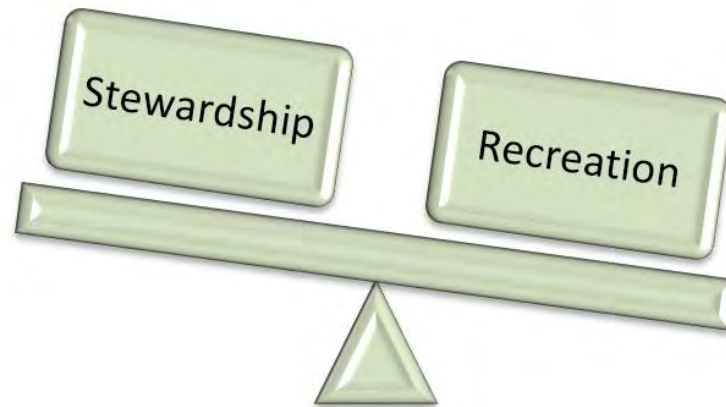
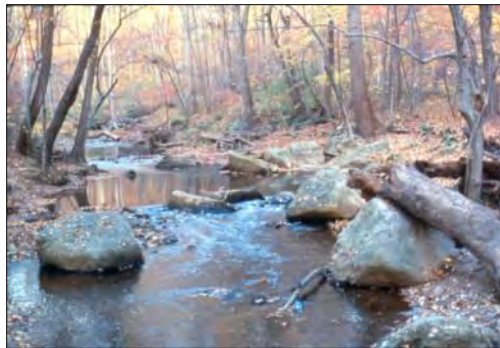


“Manage the county park system so it best meets the needs of current and future generations”

“Offer a range of leisure activities that strengthen the body, sharpen the mind, and renew the spirit”

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“Manage the county park system so it best meets the needs of current and future generations”

“Offer a range of leisure activities that strengthen the body, sharpen the mind, and renew the spirit”

Policy Guidance

Vision 2030 Strategic Plan

- Shows where in the County we need more park and recreation facilities and services
- Sets priorities for programs, park operations, marketing, management, and park planning and development

Park Recreation and Open Space (PROS) Plan

- Estimates how many and what type of recreation facilities are needed for the next 10 years
- Recommends how to deliver the facilities to meet the needs
- Provides basis for recommendations in each master plan area
- Recommends land acquisition priorities
- Recommends priorities for preserving natural and historic/cultural resources, and agricultural lands

Together, these two documents

- Will help us to set clear priorities for acquisition and development
- Guide input to park and area master plans, and the CIP



How does the PROS Plan guide our other plans?

Service Delivery Strategies for Countywide Plans

- Countywide Park Trails Plan
- Site Selection Studies for Needed Facilities

Park Recommendations in Community Master/Sector Plans

- Urban Park Plans, Guidelines, and Standards
- Master Plans for Individual Parks and Trail Corridors
- Regulatory Review – Developer provided Parks and Public Use Space
- Repurposing and Renovation Studies
- Programs of Requirement to guide Facility Plans
- CIP Prioritization
- Recreation Facility Development Plan, 2010-2030



PROS Needs Estimated by Geographic Areas

Countywide Needs

- Recreation / Aquatic Centers
- Trails
- Natural Areas
- Dog Parks
- Picnic Shelters / Group Picnic Areas
- Cultural Resources
- Ice Rinks
- Skate Parks
- Volleyball Courts
- Cricket Fields
- Civic Greens
- Community Open Space
- Urban Wooded Areas

PROS Service Area Needs

- Adult Rectangular Fields
- Youth Rectangular Fields
- Baseball Fields
- Adult Softball Diamonds
- Youth Softball Diamonds

“Planning Area” Needs

- Playgrounds
- Basketball Courts
- Tennis Courts



Long Range Park Planning Considerations

- What are the existing conditions?
- What do residents like to do outdoors?
- What do residents want to do outdoors now that they can't (not enough land, need more facilities, etc.)?
- Where is the civic center of a community? Is there more than one?
- What opportunities will be available as part of future land redevelopment?
- What should be the ultimate overall pattern of parkland and open space?



Sector and Master Plans to manage change in Montgomery County



Urban Park Pattern and Role (Hierarchy)

Each area master plan should include a system & hierarchy of open spaces based on the roles of each type of open space

- **For Sector Plan Areas:**
 - **active recreation destinations** located within or near the plan area, including courts, playgrounds, and lawn areas large enough for pick up soccer, festivals or events, etc.
 - **a central “civic green”** urban park (see Chapter 3), ranging in size from ½ to 2 acres, depending on projected densities, located in close proximity to a public transit hub, next to activating uses, with a mixture of hard and soft surfaces including a central lawn area for events
 - **an interconnected system** of sidewalks and trails to connect parks and open spaces
 - **wooded areas** that will provide a sense of contact with nature
- **For each Urban Neighborhood:** a neighborhood green, urban buffer park, or community use recreational park
- **For each Block:** an urban square, plaza, or green area
- **For each Building:** outdoor recreation space
- **For each Residence:** private outdoor space

Example of Open Space Hierarchy



A HIERARCHY

Each area master plan should include a system of open spaces based on the roles of each type of open space. The amount and size of open spaces may vary from plan to plan and should be directly proportional to the projected density, and adjusted to the pattern of existing open space and other factors such as community-specific needs.

The following hierarchy should be applied to any new urbanizing area:

FOR THE SECTOR PLAN AREA:

- Active recreation destinations located within or near the plan area, including courts, playgrounds, and lawn areas large enough for pick up soccer, festivals or events, etc.
- A central “civic green” urban park (Chapter 3), ranging in size from ½ to 2 acres, depending on projected densities, located in close proximity to a public transit hub, next to activating uses, with a mixture of hard and soft surfaces including a central lawn area for events.
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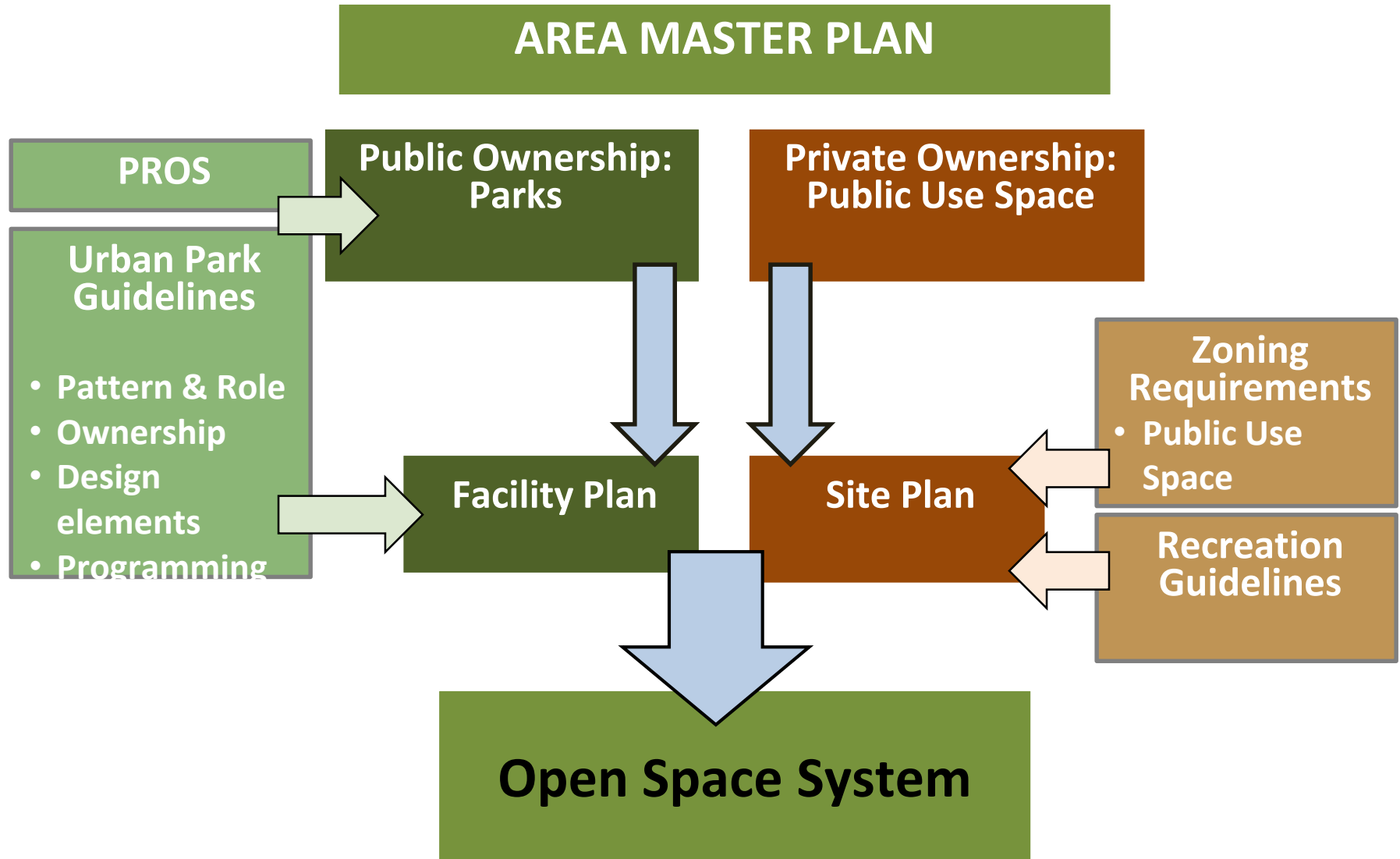
FOR EACH URBAN NEIGHBORHOOD: A neighborhood green, urban buffer park, or community use recreational park.

FOR EACH BLOCK: An urban square, plaza, or green area.

FOR EACH BUILDING: An outdoor recreation space.

FOR EACH RESIDENCE: A private outdoor space.

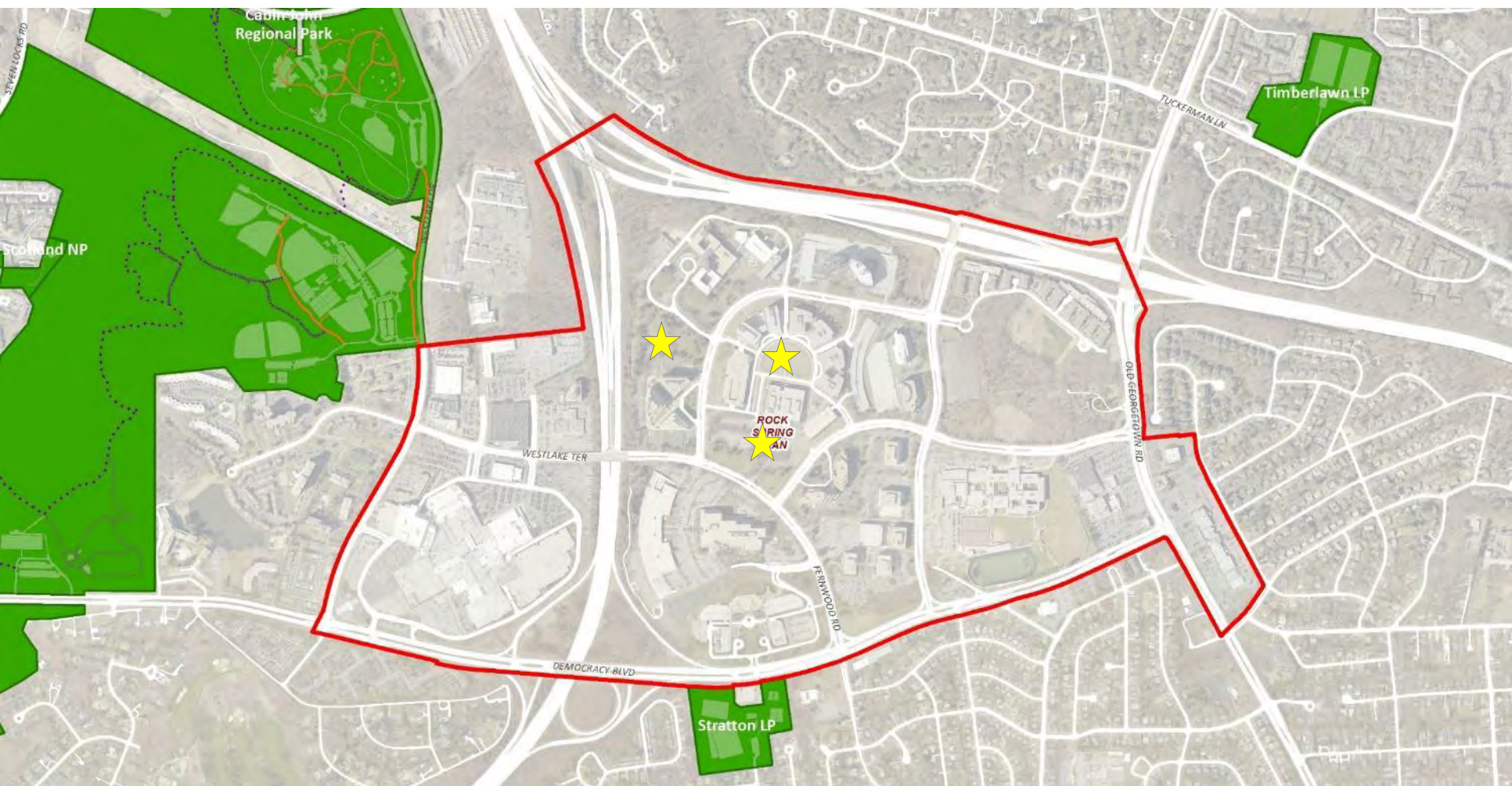
Public and Private Sector Roles in Open Space Systems



Preliminary park planning issues in Rock Spring



Preliminary park planning issues in Rock Spring



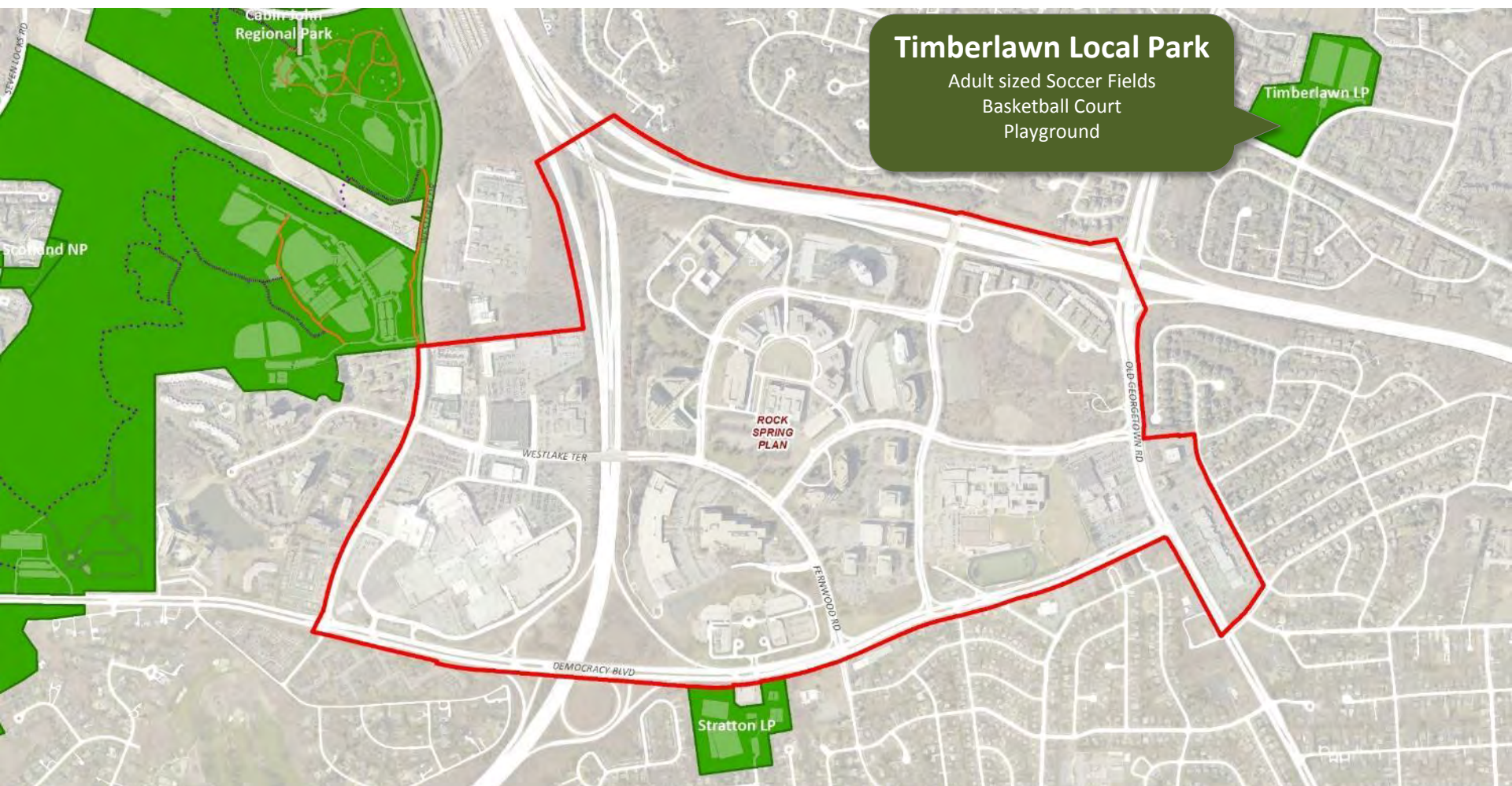
Preliminary park planning issues in Rock Spring



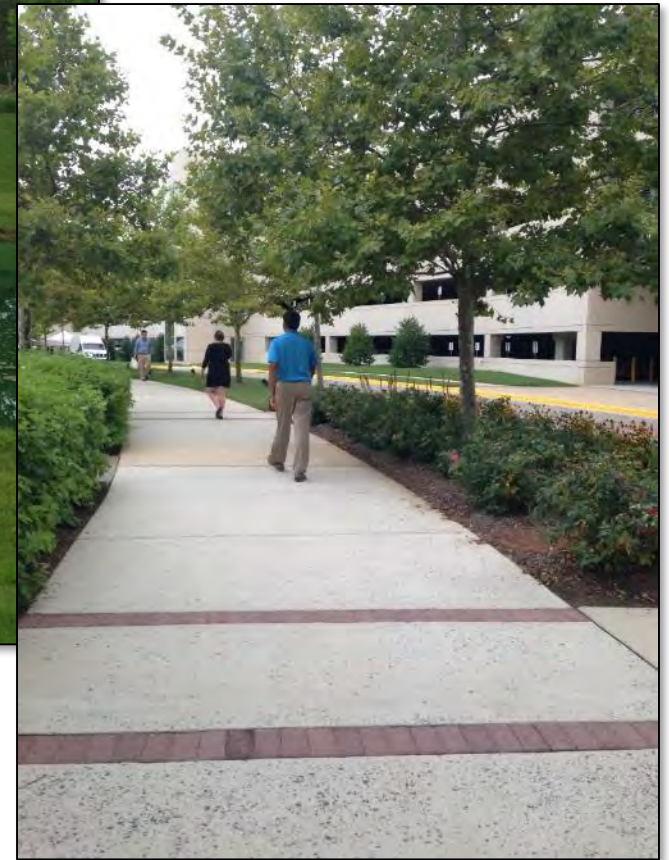
Preliminary park planning issues in Rock Spring



Preliminary park planning issues in Rock Spring



Examples of Existing Open Spaces in the Rock Spring Area



Stormwater Pond at Rock Spring Park

Examples of Existing Open Spaces in the Rock Spring Area



*Open Green Space at the
Democracy Associates building*



Examples of Existing Open Spaces in the Rock Spring Area



*Plaza at the Democracy
Associates building*



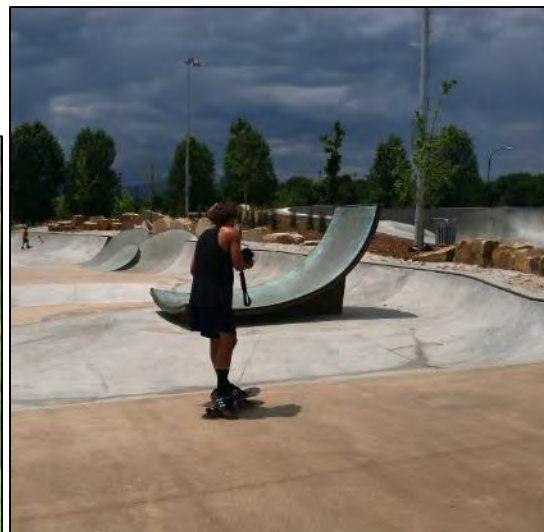
Examples of (soon to be) Existing Open Space in the Rock Spring Area



Planned open space at Montgomery Row

What our PROS Plan says is needed in the North Bethesda-Bethesda Chevy Chase area

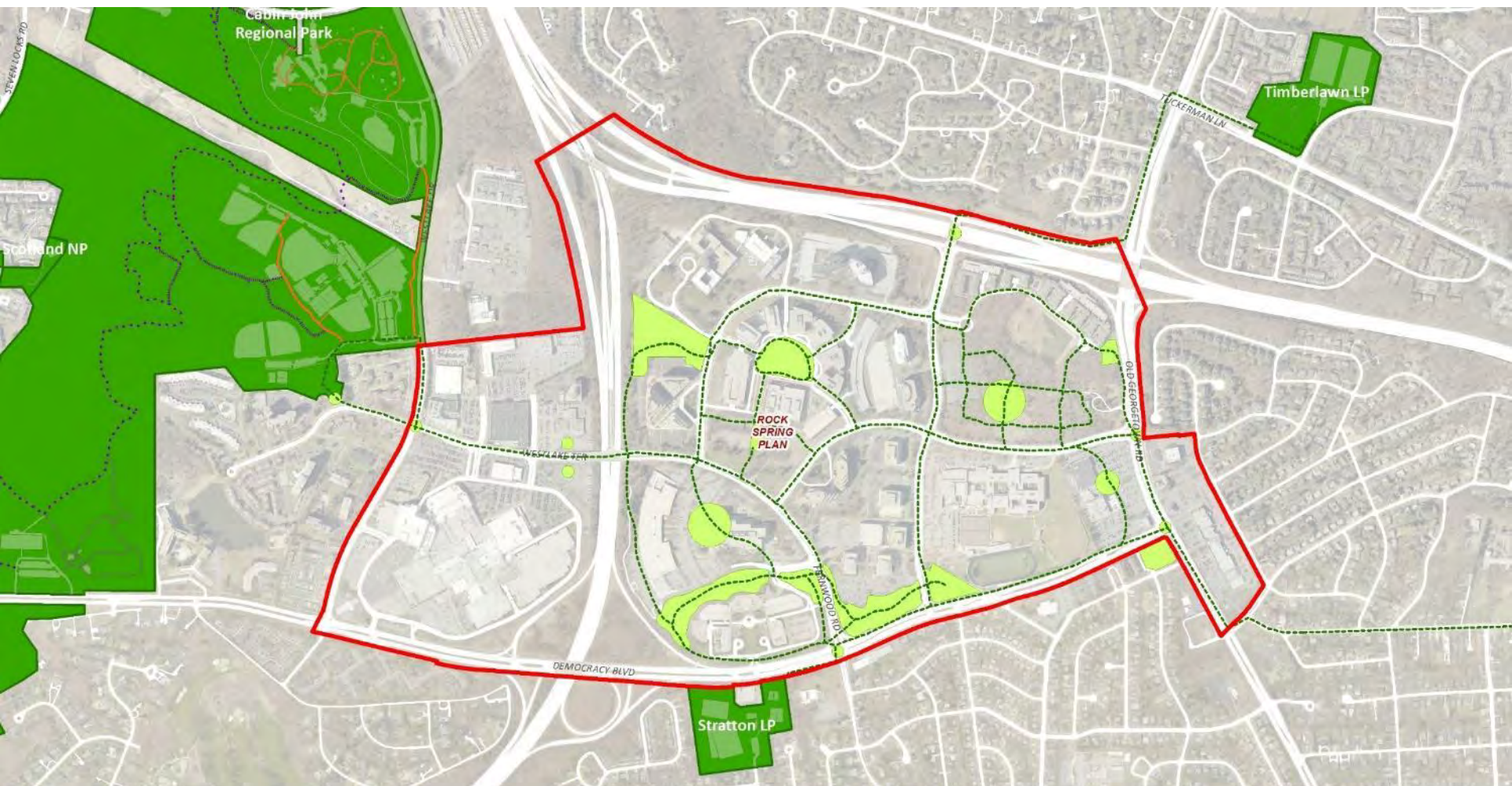
- Rectangular Fields
- Playgrounds
- Tennis Courts
- Dog Parks
- Skate Parks
- Community Open Space
- Community Gardens
- Trail Connections



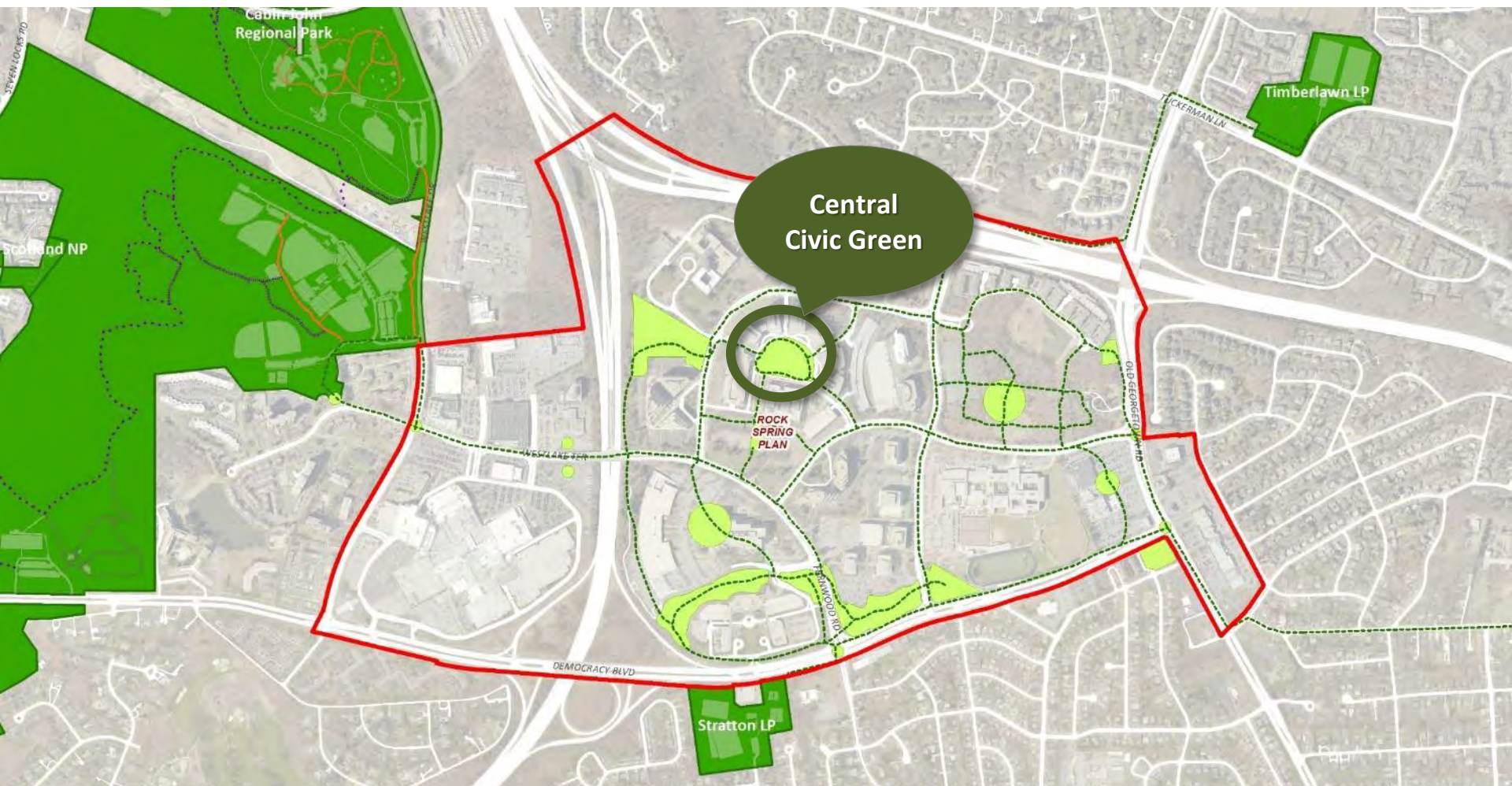
What we have heard about parks and open spaces from you...

- More parks and open spaces within the plan area
- Connections: Safer ways for pedestrian and cyclists to access Stratton Local Park and Cabin John Regional Park and surrounding communities.
- Trees: More trees along sidewalks and streets
- Recreational fields
- Recreation center
- Walking / Running / Biking Trails that improve circulation through the area
- New parks with new facilities, like dog park and playground
- Put the stormwater pond below ground and use that area as open space
- Need for useful green open space at the Rock Spring Center project site

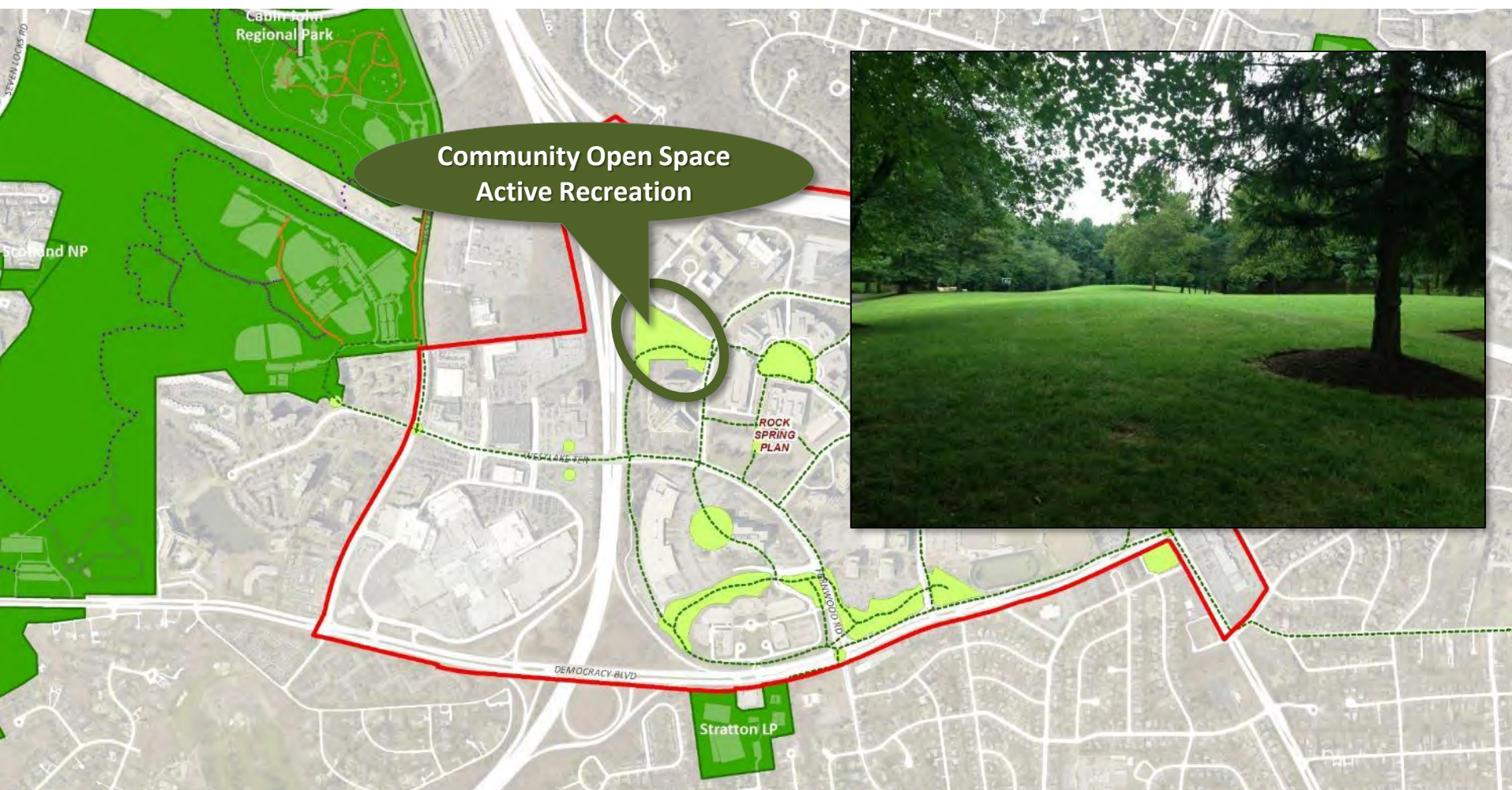
Potential Park, Trail and Open Space Opportunities



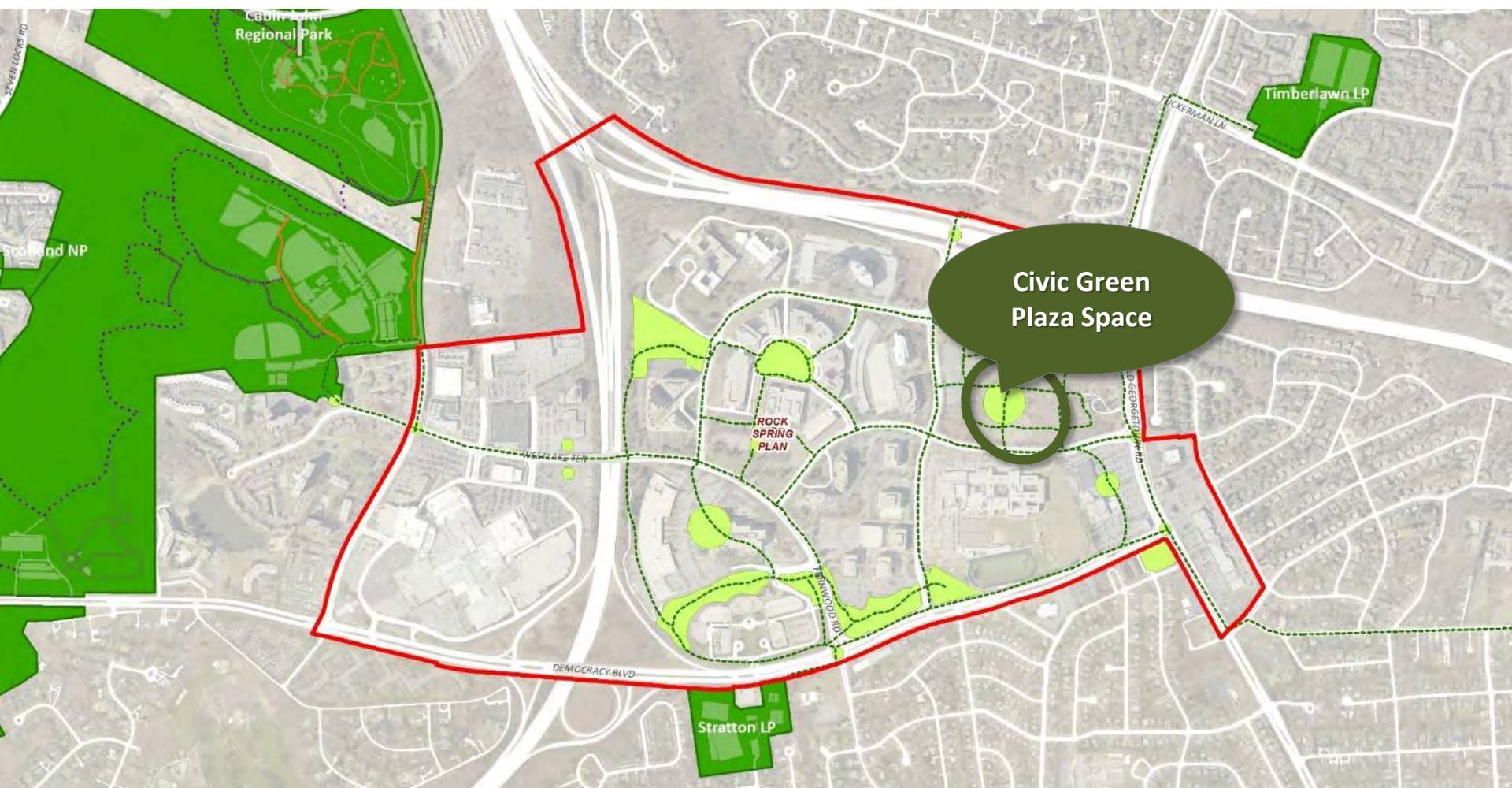
Potential Park, Trail and Open Space Opportunities



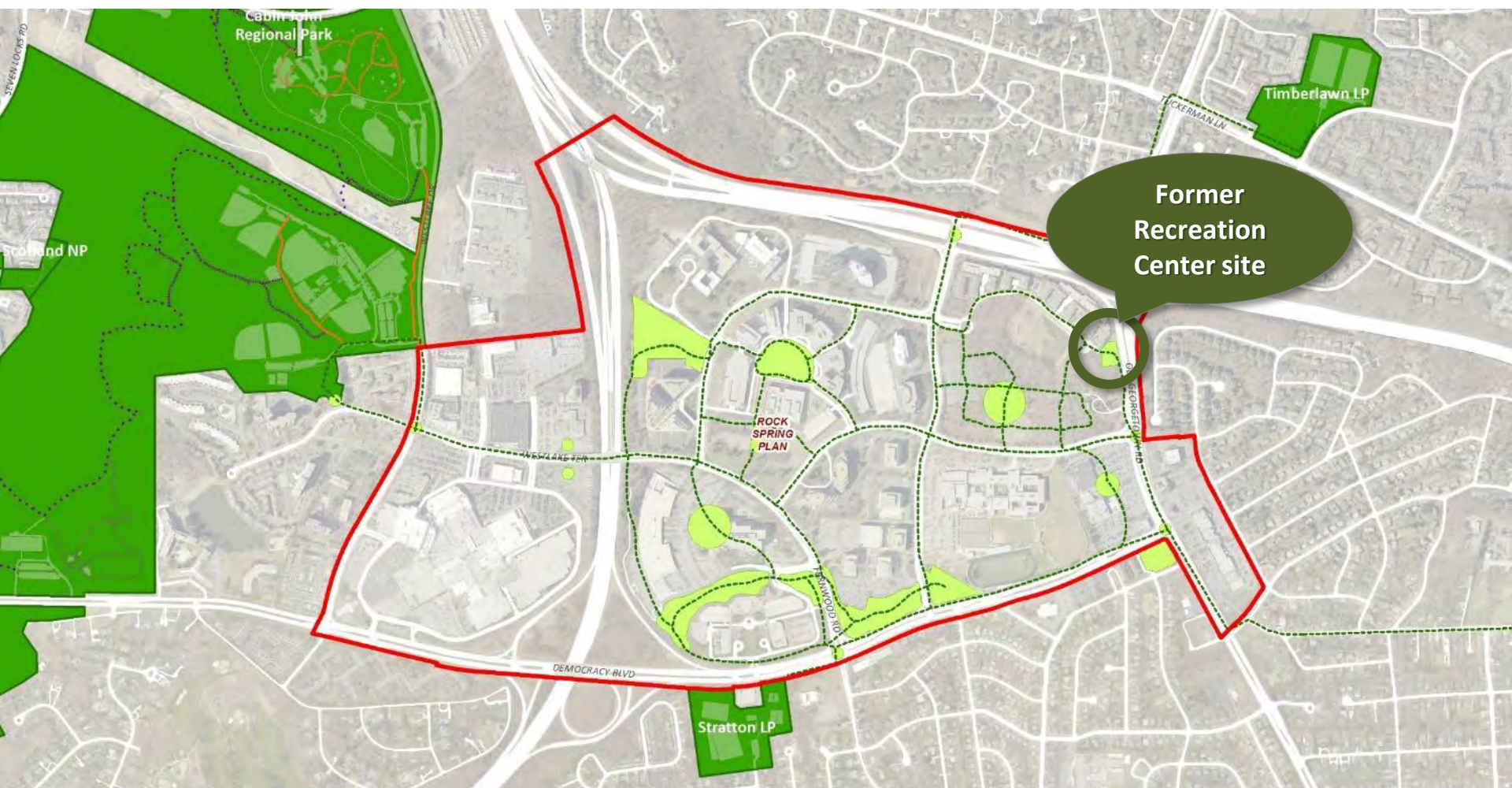
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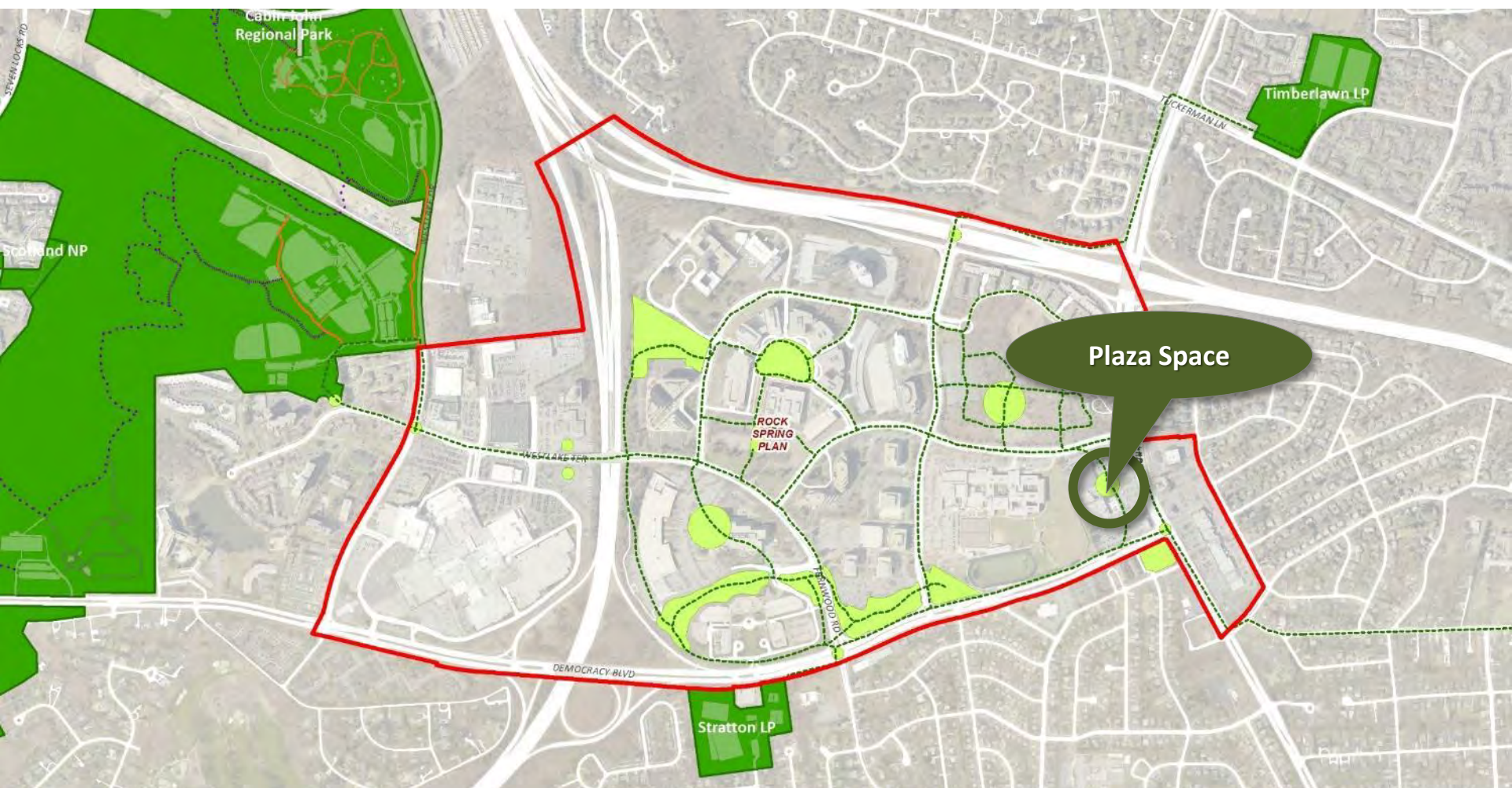
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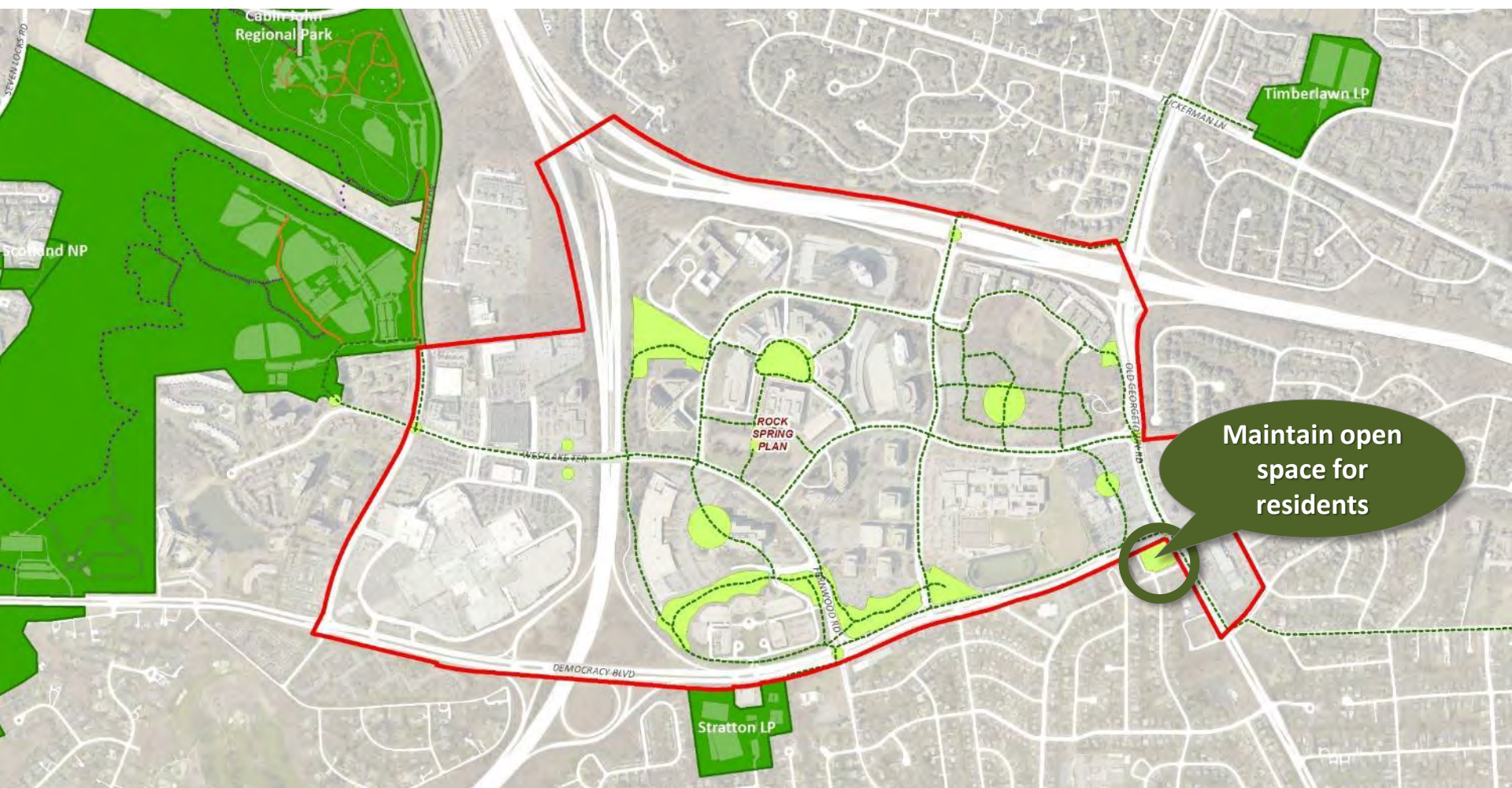
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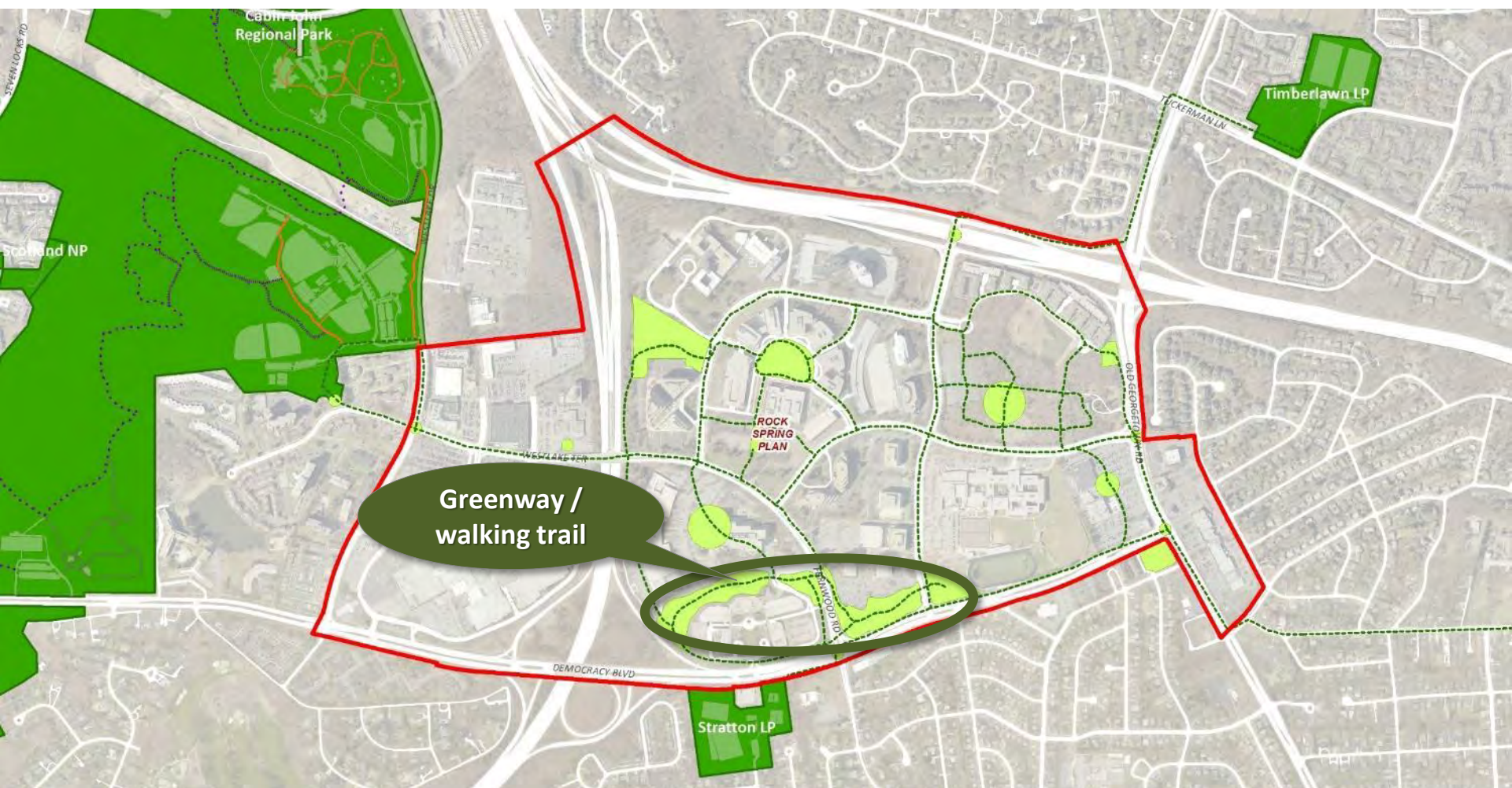
Potential Park, Trail and Open Space Opportunities



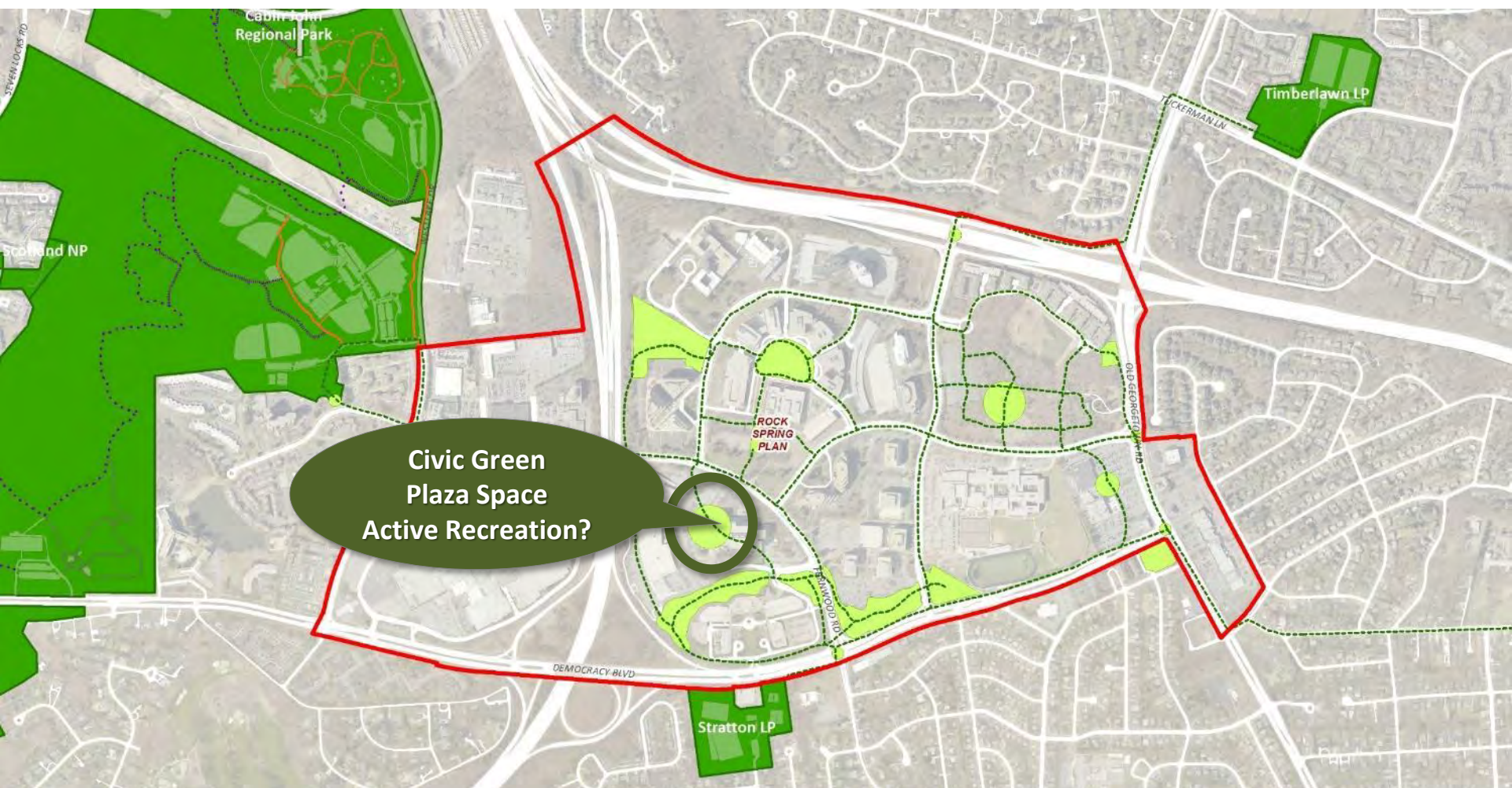
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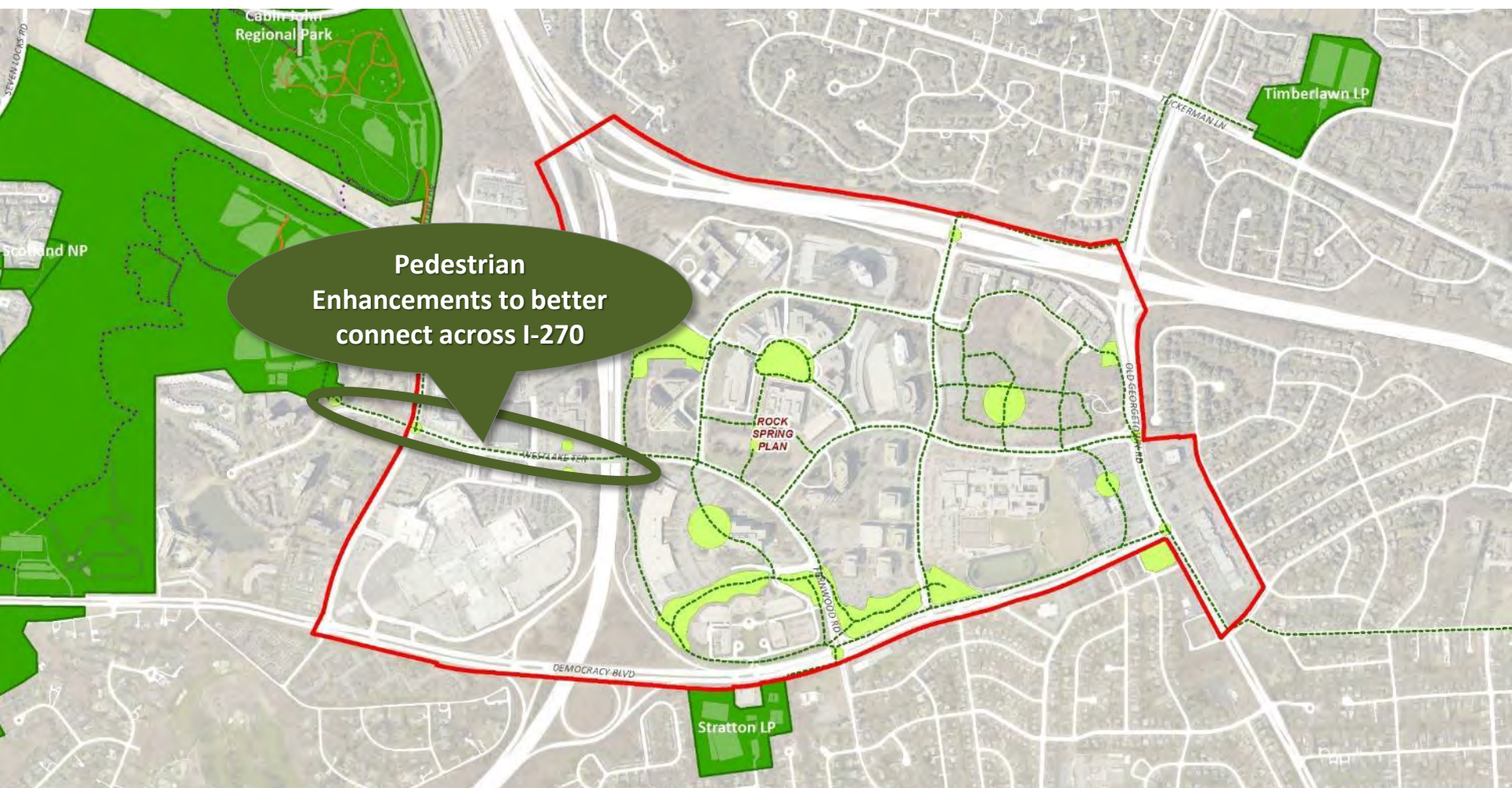
Potential Park, Trail and Open Space Opportunities



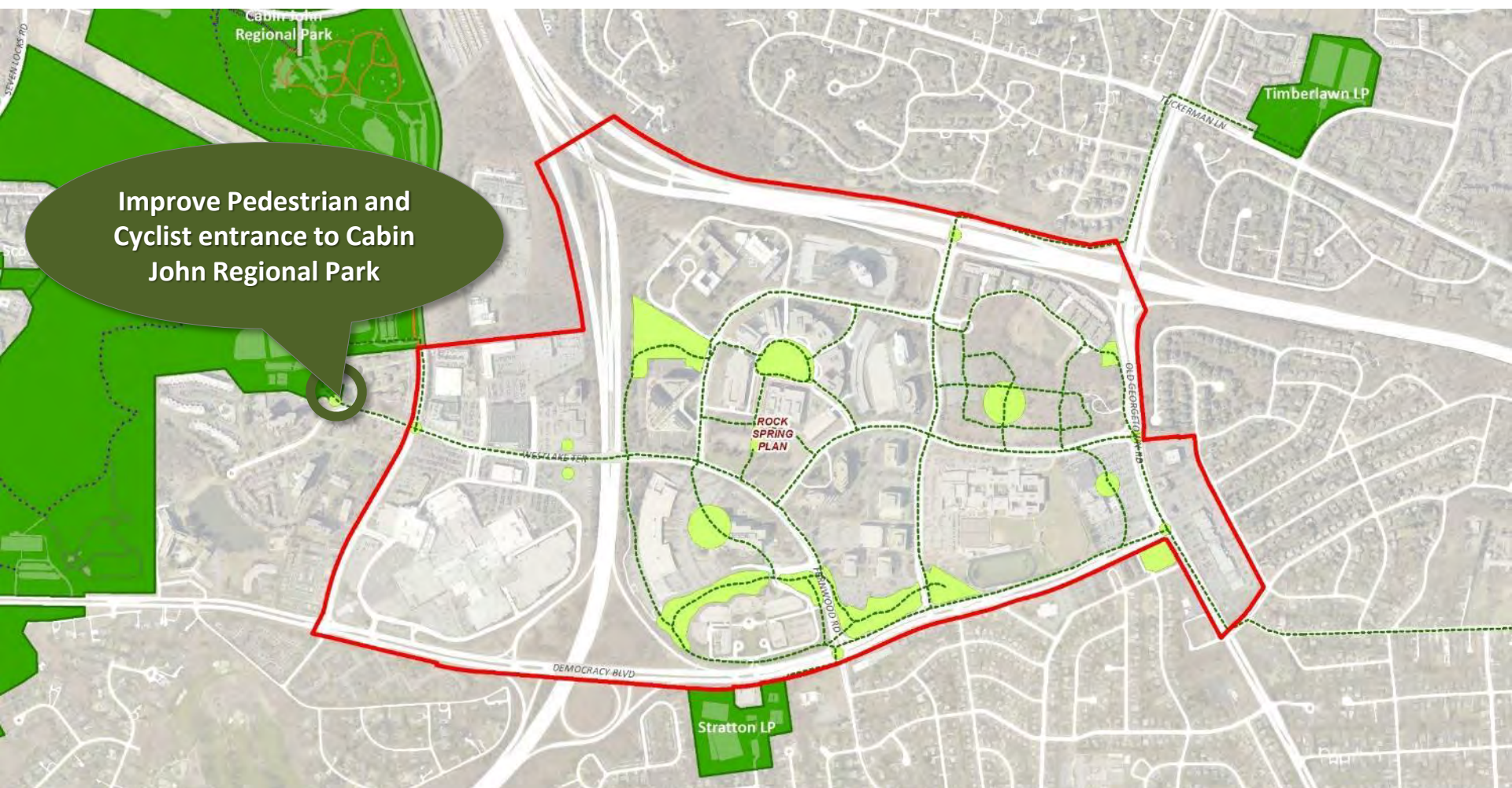
Potential Park, Trail and Open Space Opportunities



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Potential Park, Trail and Open Space Opportunities



Potential Park, Trail and Open Space Opportunities



Potential Park, Trail and Open Space Opportunities



Parks and Open Space Opportunities



Open flexible lawns for different types of play...

Parks and Open Space Opportunities



Shaded gathering areas for lunch time seating and picnicking

Parks and Open Space Opportunities



Shaded areas for play near retail centers

Parks and Open Space Opportunities



Recreational amenities along linear open spaces for active aging adults....

Parks and Open Space Opportunities



Unique play amenities.....

We want to hear from you!

There are boards with images and flip charts in the back.

Please let us know if we are on the right track – what's missing? What do you like or dislike?



Parks, Trails and Open Spaces

What kinds of things do you like to do outside?



Where do you currently spend time outside in the Rock Spring area?



What types of outdoor spaces do you think Rock Spring needs?



M-NCPPC Montgomery County Planning Department montgomeryplanning.org

M-NCPPC Montgomery Parks parkplanning.org

[illegible]

susanne.paul@montgomeryparks.org | 301.650.4392



Community Meeting February 25, 2016 Walter Johnson High School



Relmagine Rock Spring!

Eric Graye, Functional Planning
Eric.Graye@montgomeryplanning.org
montgomeryplanning.org/rockspring

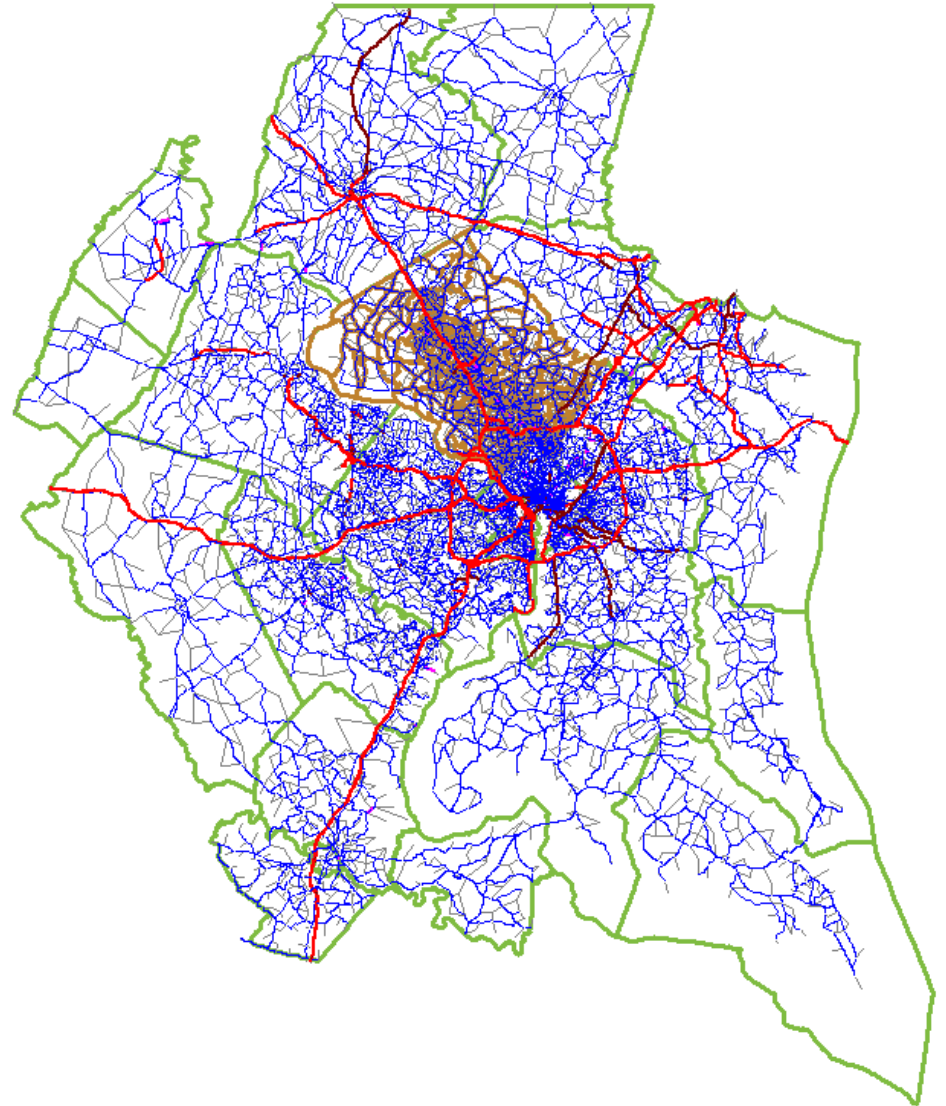
Transportation Modeling Overview

- ☐ 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

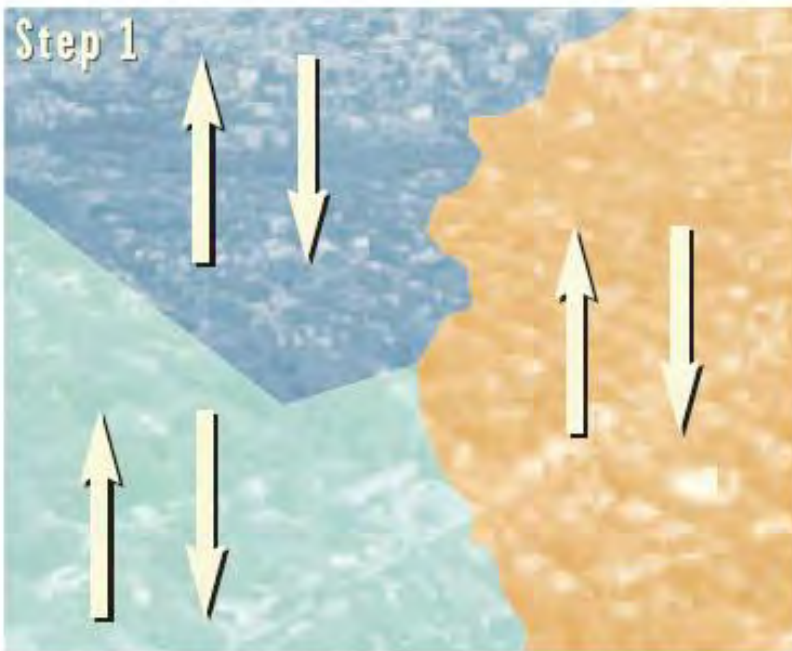


Regional Model Framework

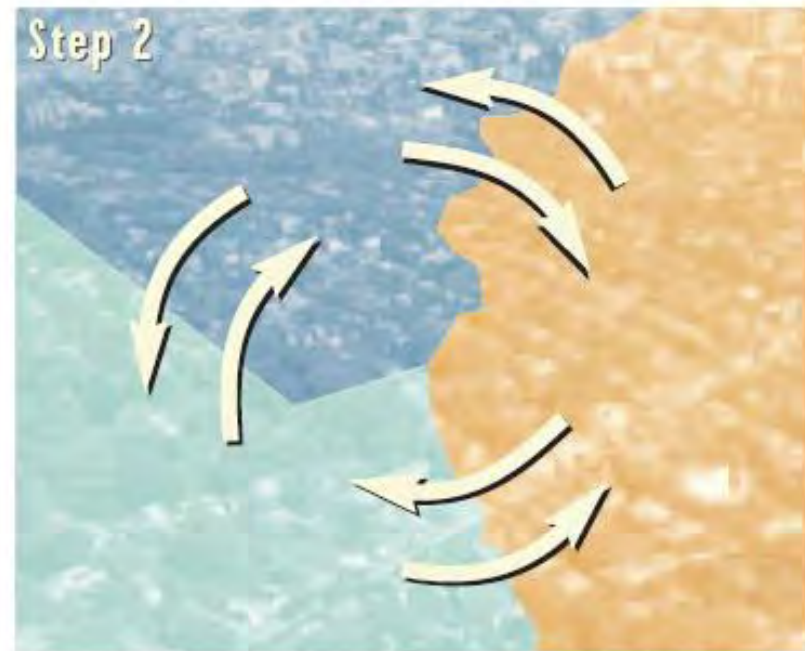


Regional Model Framework

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



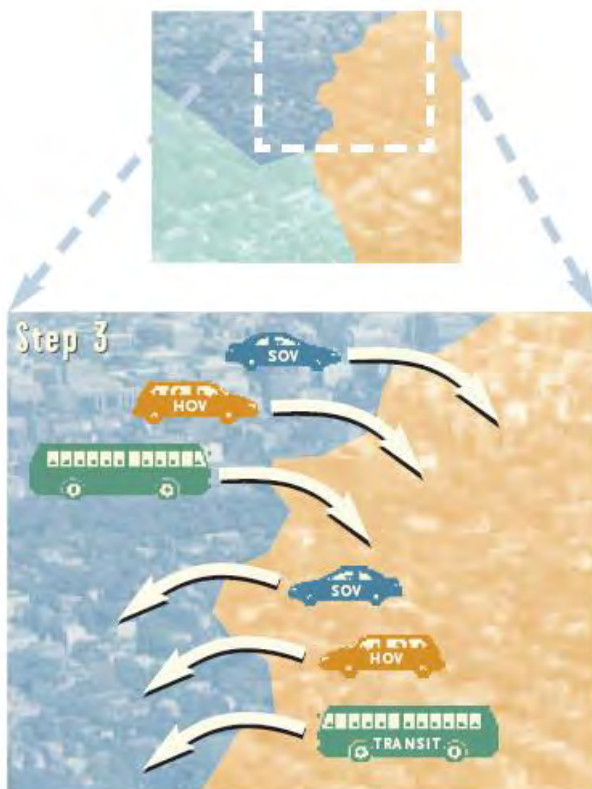
Trip generation in three fictitious traffic analysis zones: This step estimates the number of trips produced by and attracted to each zone.



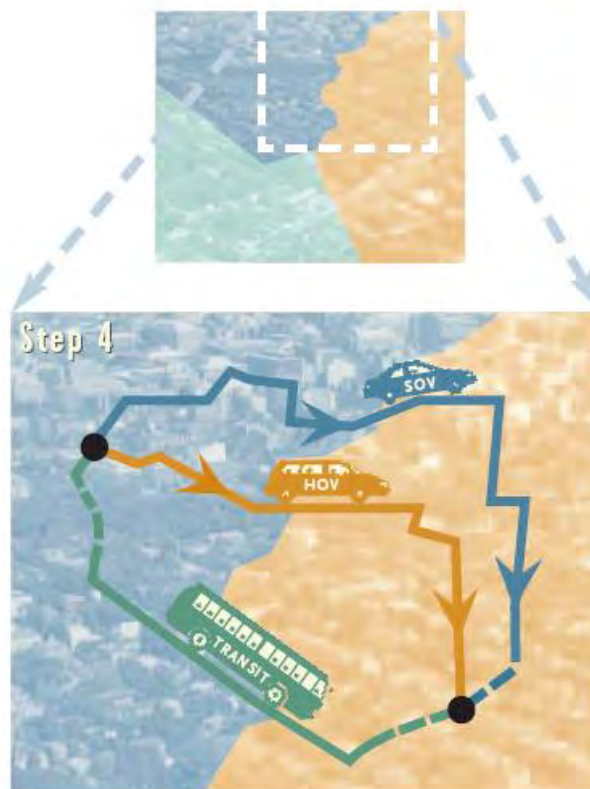
Trip distribution among three fictitious zones: This step estimates how many trips are going from zone to zone.

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.



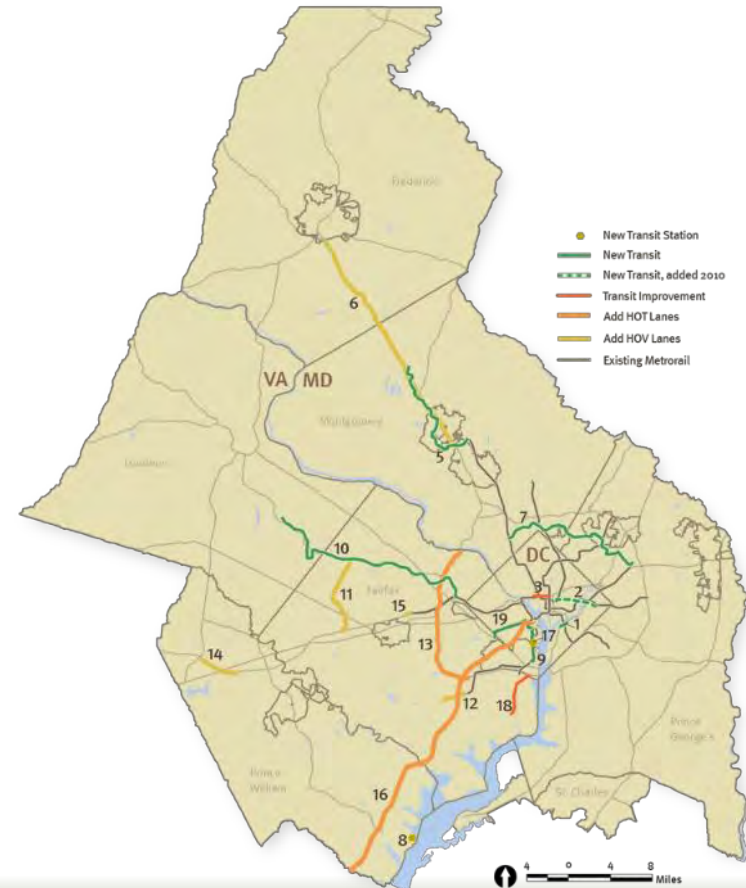
Trip assignment between two fictitious traffic analysis zones: Selecting the fastest route between zones.

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

Highways



Transit



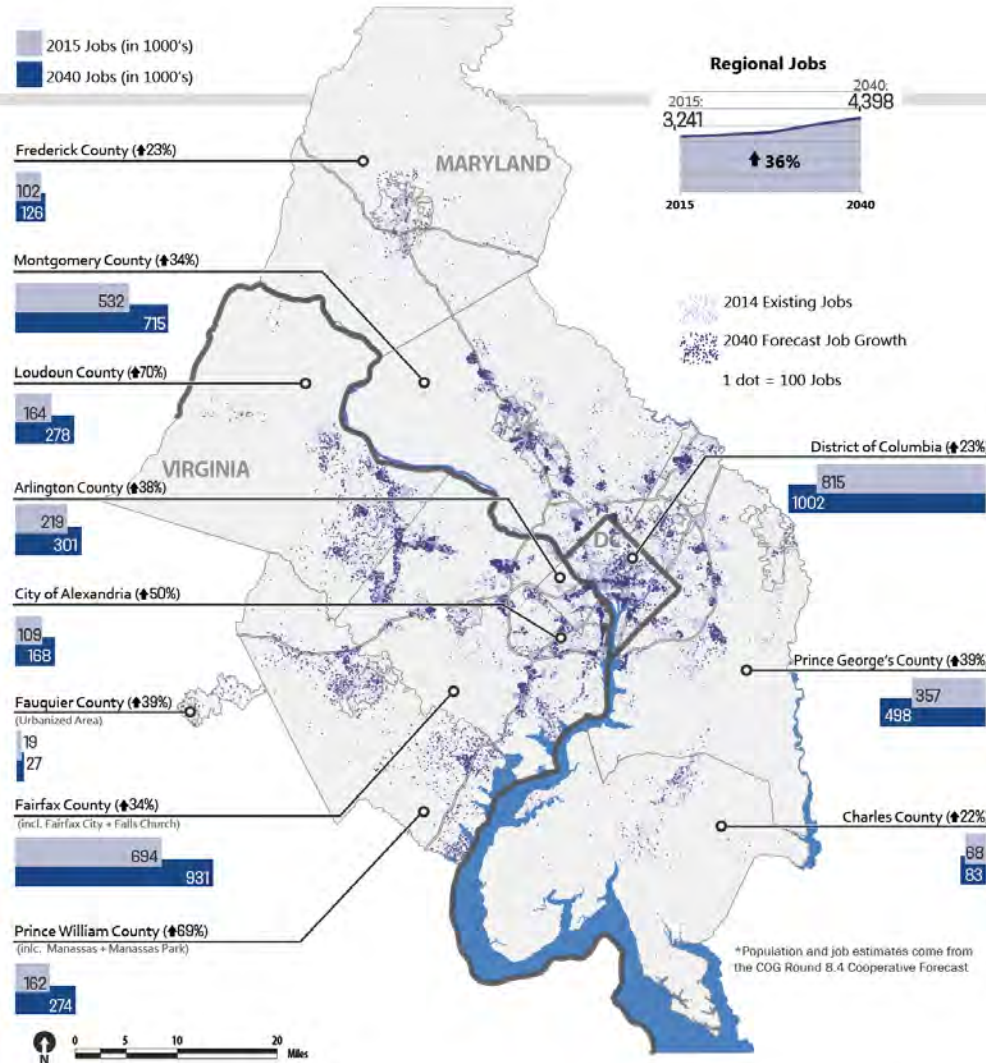
Job Growth

- 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.
(Urbanized Area)

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



Regional Land Use Assumptions

Population Growth

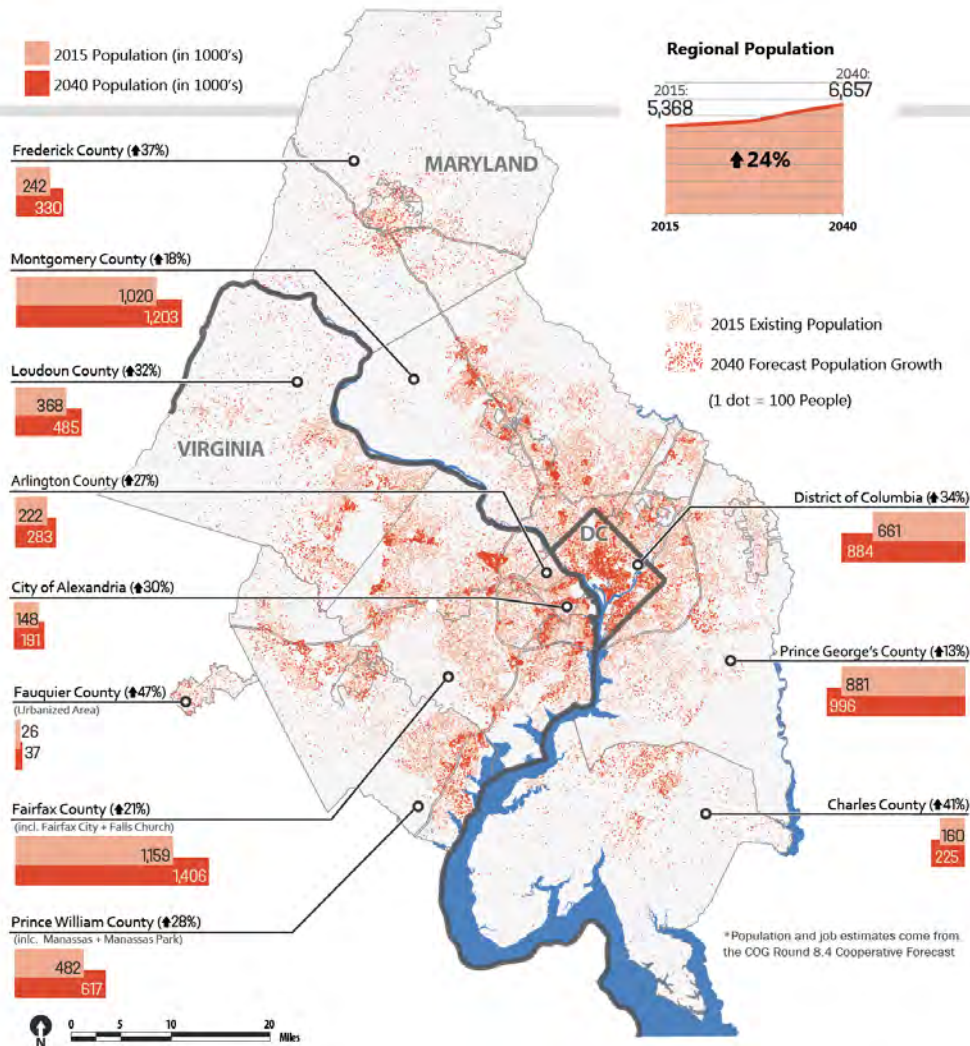
- By 2040, the region is expected to grow by 24% to over 6.6 million people, an increase of 1.3 million people.
- The region's outer suburban jurisdictions are expected to see the highest rates of growth, while the inner suburban jurisdictions and regional core will continue to be home to the most population.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

Regional Core:
District of Columbia
Arlington Co.
Alexandria

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

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

2015 Population (in 1000's)
2040 Population (in 1000's)



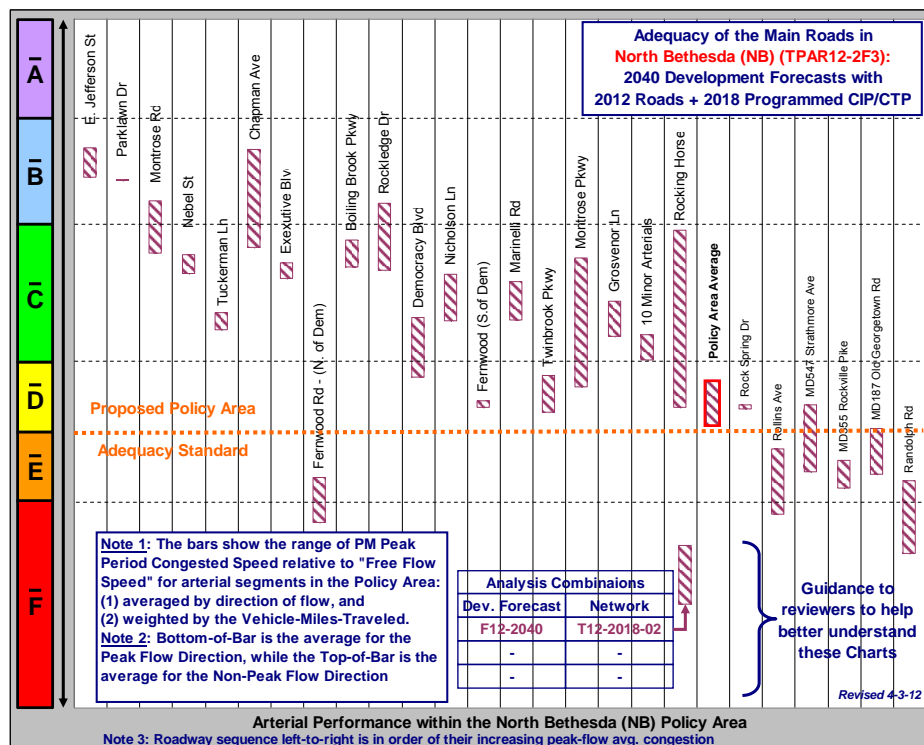
Area-wide and Local Transportation Analysis

Transportation Policy Area Review (TPAR)

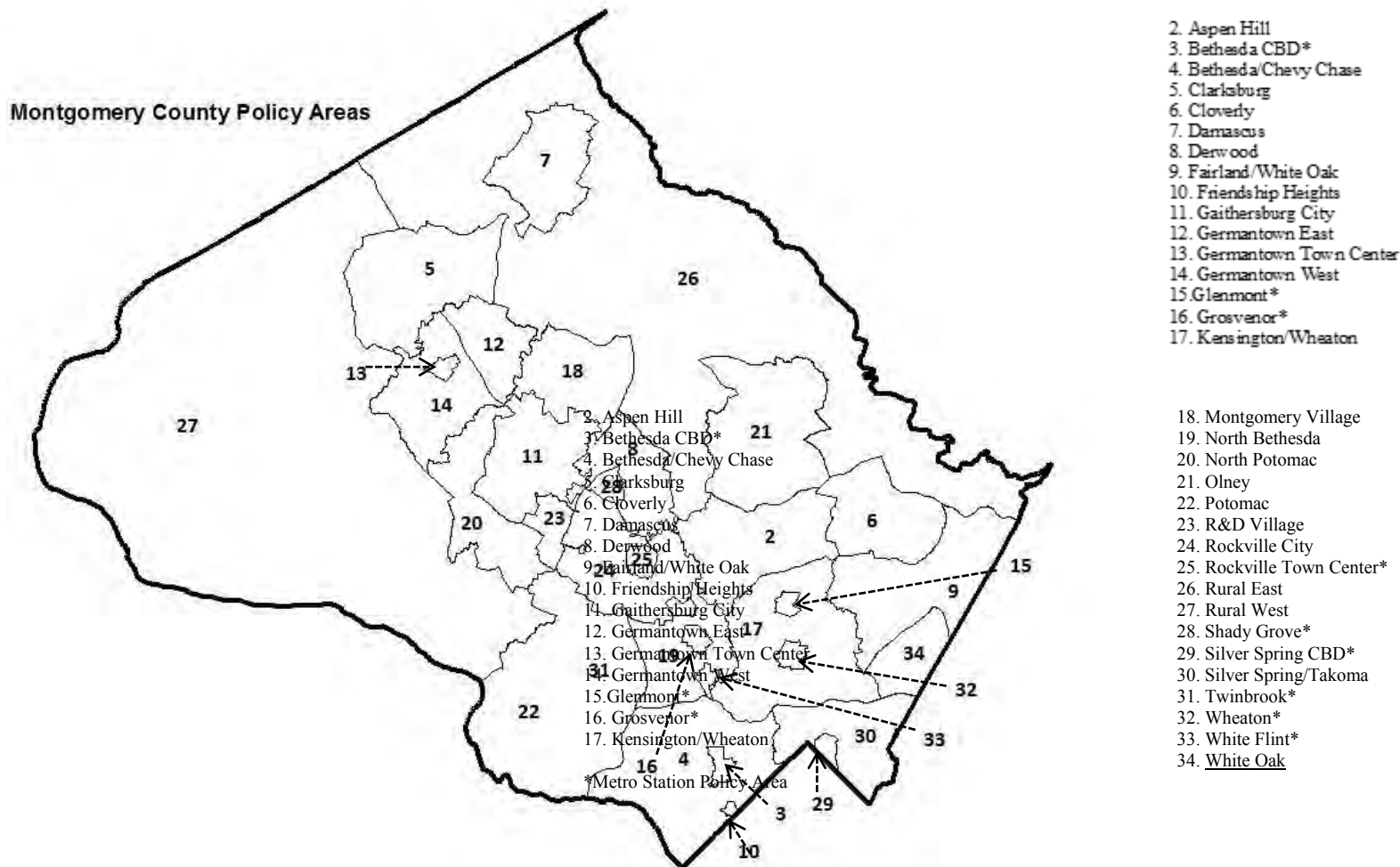
❑ Process evaluates the ratio of PM peak period speed relative to “free flow” speed for arterial roadway segments in policy areas.*

❑ Used to assess land use/transportation balance

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



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



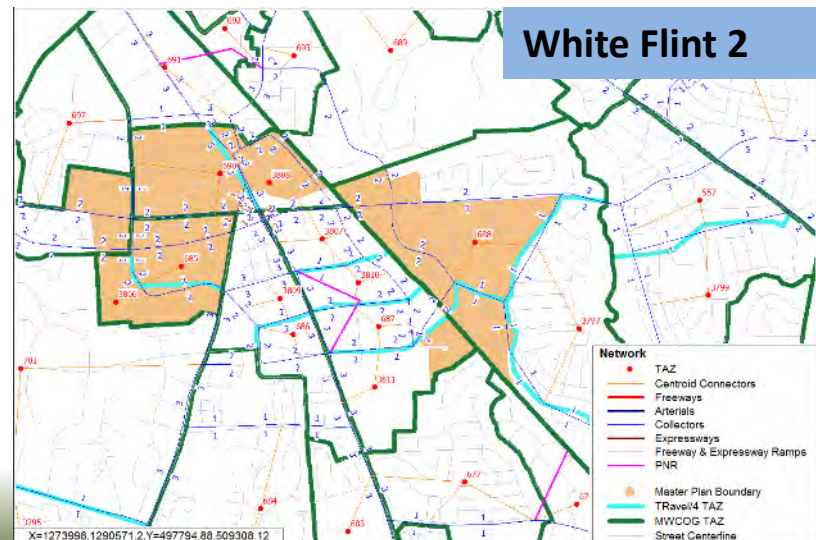
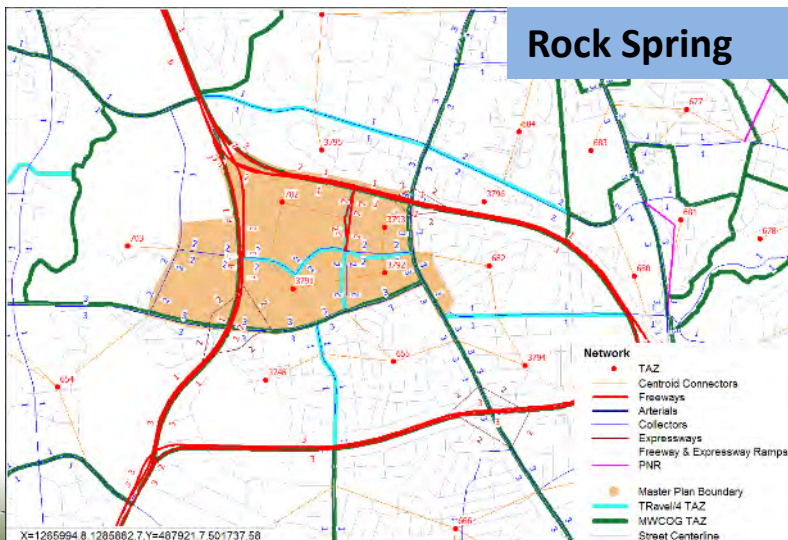
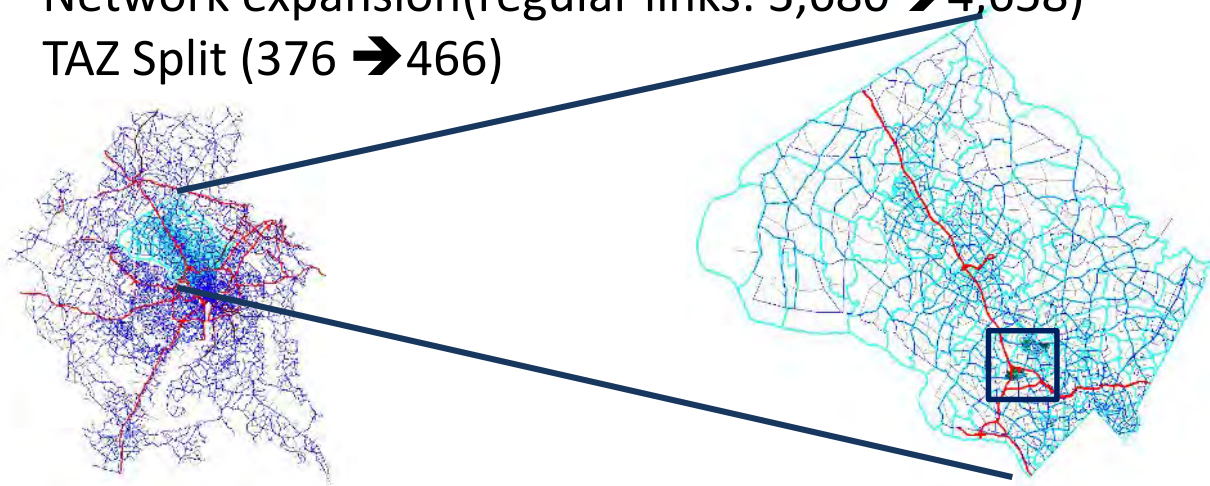
Local Area Transportation Analysis

- Subarea traffic analysis (Master/Sector Plans)
- Intersection-level transportation performance analysis
- Reflects changes to the local land use and/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
 - Observed 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)



Transportation Planning in the Rock Spring Master Plan

- ☐ Initial Community Feedback
- ☐ Pedestrian Safety
- ☐ Bicycle Network
- ☐ North Bethesda Transitway
- ☐ Traffic Congestion

Aaron Zimmerman, Transportation Planning, Aaron.Zimmerman@montgomeryplanning.org

Initial Community Feedback



Pedestrian Safety

Pedestrian Challenges

- Wide Roads
- Fast Moving Traffic
- Sidewalks Close to Road
- Long Superblocks
- Lack of Grid Network
- No/Small Ped Refuges
- Missing Crosswalks
- No stop/signal control
- Free Right-Turn Lanes



Rock Spring Drive
Looking East from
Rockledge Drive

Westlake Terrace
Looking West from
I-270 Ramps on Bridge



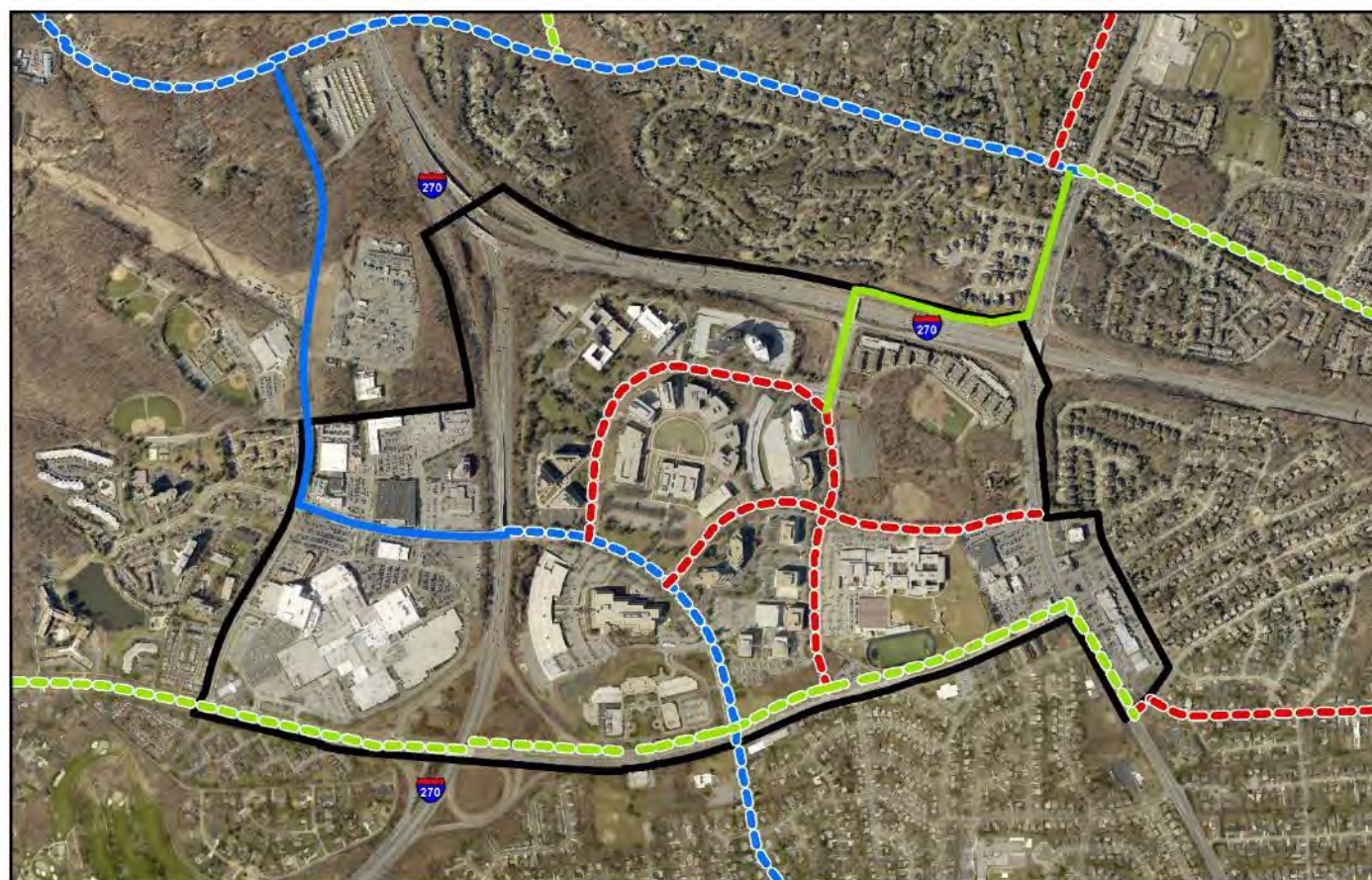
Pedestrian Safety

Remove Free Right-Turns

- Slows Traffic
- Shortens Ped Crossing
- Little or no impact on vehicle congestion



Existing & Proposed Bicycle Network



- Rock Spring Master Plan
- Bikeways Classifications**
- Shared Use Path Proposed
- Shared Use Path Existing
- Bike Lanes Proposed
- Bike Lanes Existing
- Shared Road Proposed

ROCK SPRING MASTER PLAN Existing + Proposed Bicycle Network

0 1/4 1/2
Miles



Low Stress Bicycle Network

What we
WANT



What we
HAVE



Source: Dongho Chang, City of Seattle

Green/Blue: Low Stress
Yellow/Red: Med-High Stress

Existing Conditions LTS Analysis



Possible Bicycle Network Improvements

25 MPH

30 MPH

30 MPH

35 MPH

45 MPH+

Least Separation

Most Separation



Sharrow

**Traditional
Bike Lane**

**Buffered
Bike Lane**

**Separated
Bike Lane /
Cycletrack**

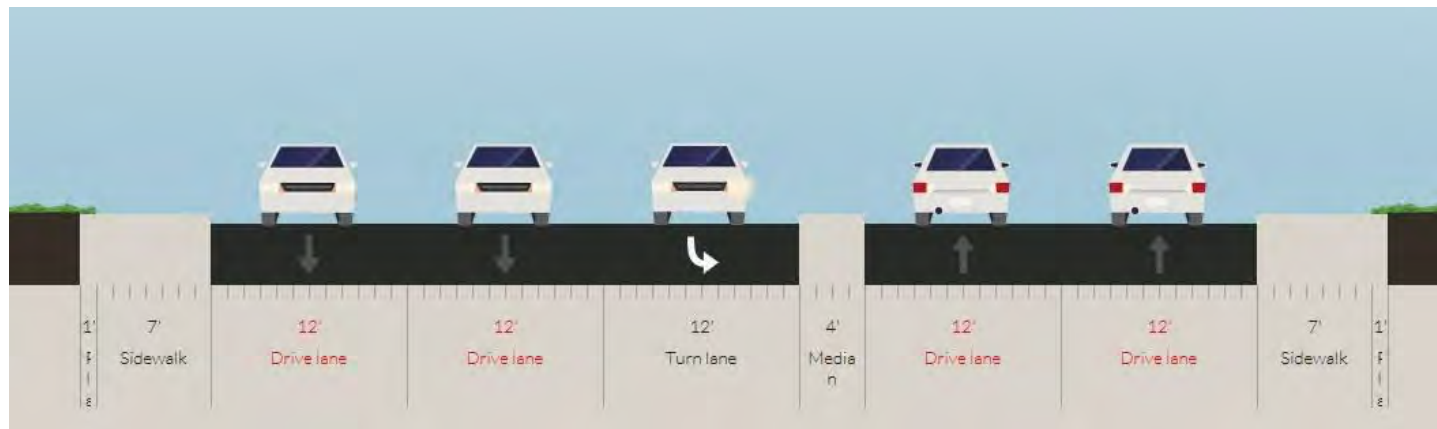
**Shared-Use
Path**

Note: MPH thresholds are for roads w/fewer than 9k vehicles per day. Roads w/above 9k vehicles per day always require physical separation for 'Interested but Concerned' group.

Separated Bike Lanes Example

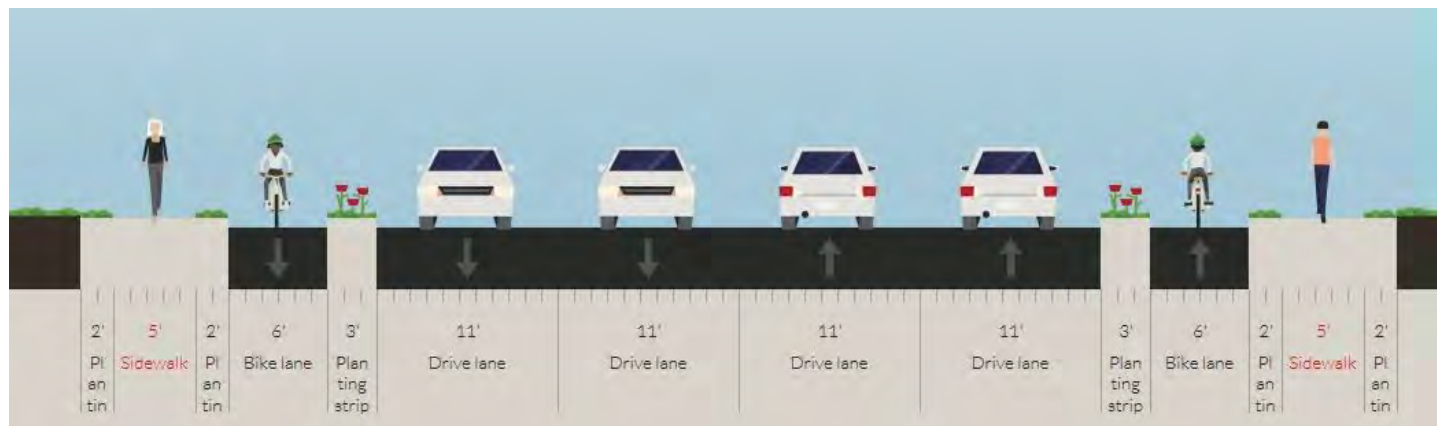
Before

80 ft ROW / 64 ft curb-to-curb



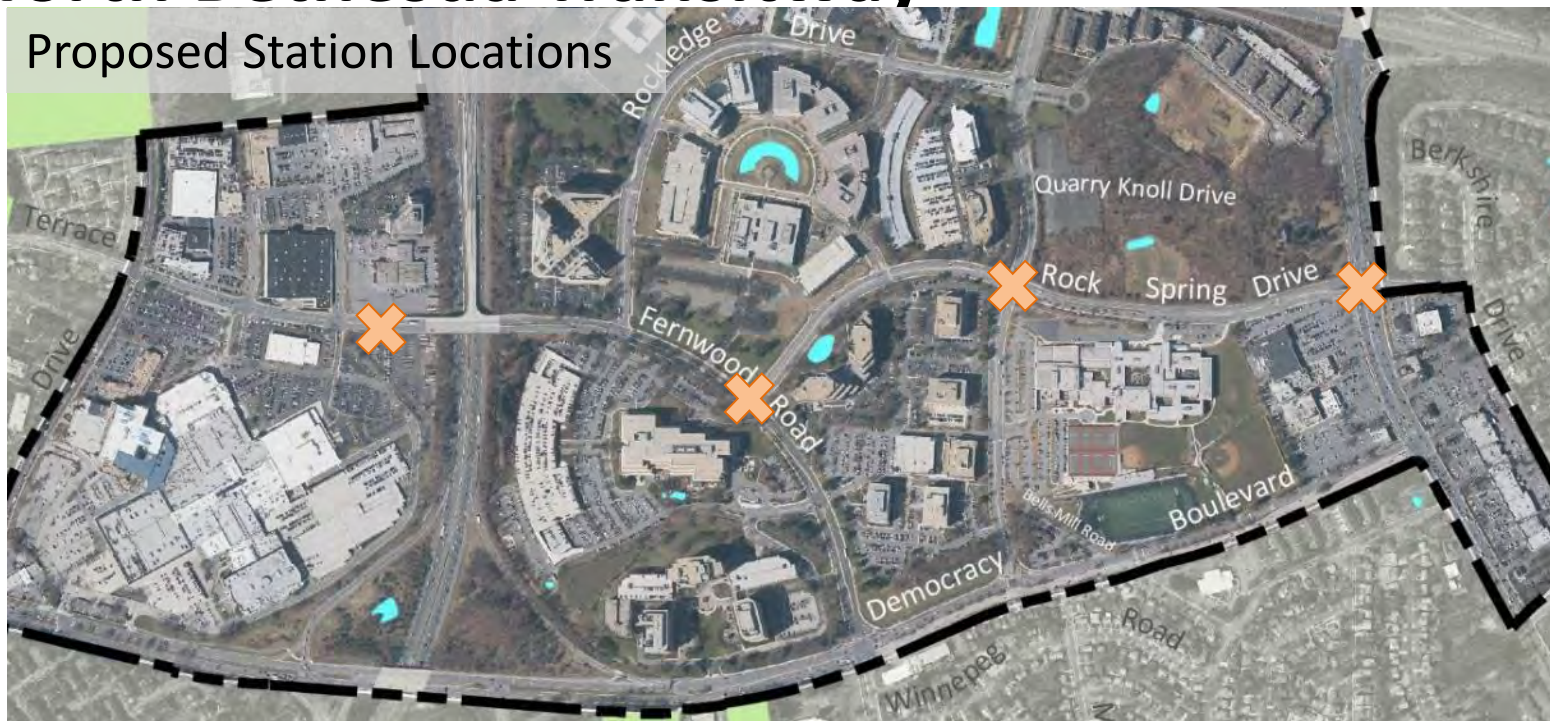
After – w/ Bike Lanes

80 ft ROW / 44 ft curb-to-curb



North Bethesda Transitway

Proposed Station Locations



Alexandria, VA
Metroway BRT

- Only highest peak hour CLV shown
- Data collected in 2015 & 2016

Traffic Congestion

