



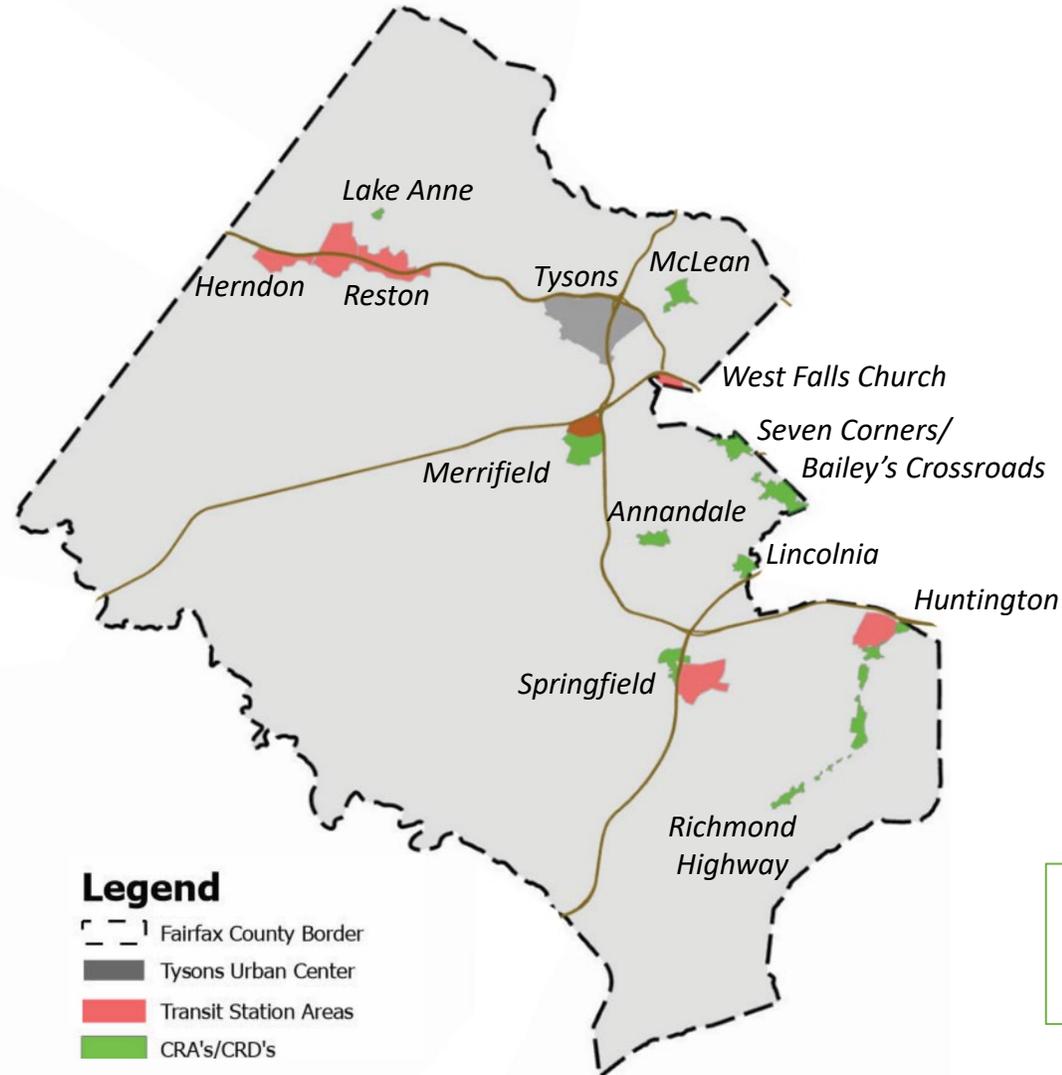
Proposed Changes for Street Trees

Tysons, Transit Station Areas,
& Community Revitalization
Districts/Areas

Planning Commission
Environment Committee
October 6, 2022

Where would changes apply?

- Annandale CRD
- Bailey's Crossroads/Seven Corners CRD
- Herndon TSA
- Huntington TSA
- Lake Anne CRA
- Lincolnia CRA
- McLean CRD
- Merrifield CRA
- Reston TSAs
- Richmond Highway Corridor (inclusive of the CRDs and SNAs)
- Springfield CRD and TSA
- Tysons Urban Center
- West Falls Church TSA



Less than 4% of Fairfax County's land area

Purpose: Encourage Street Trees!

1. Count street trees toward 10-year canopy credit (currently canopy credit is offered in Tysons only)
2. Offer an Alternative Tree Planting Standard to make it easier to plant trees where:
 - Walking and biking are common
 - Constrained existing conditions makes planting difficult

Landscape architect Henry Arnold once said, *“Fifty percent of urban design is, street trees.”*

On a tree-lined street, look up; the canopy forms the ceiling of our collective room. Arnold wrote, *“An urban street without street trees is like a building without a roof.”*



What's the Issue?



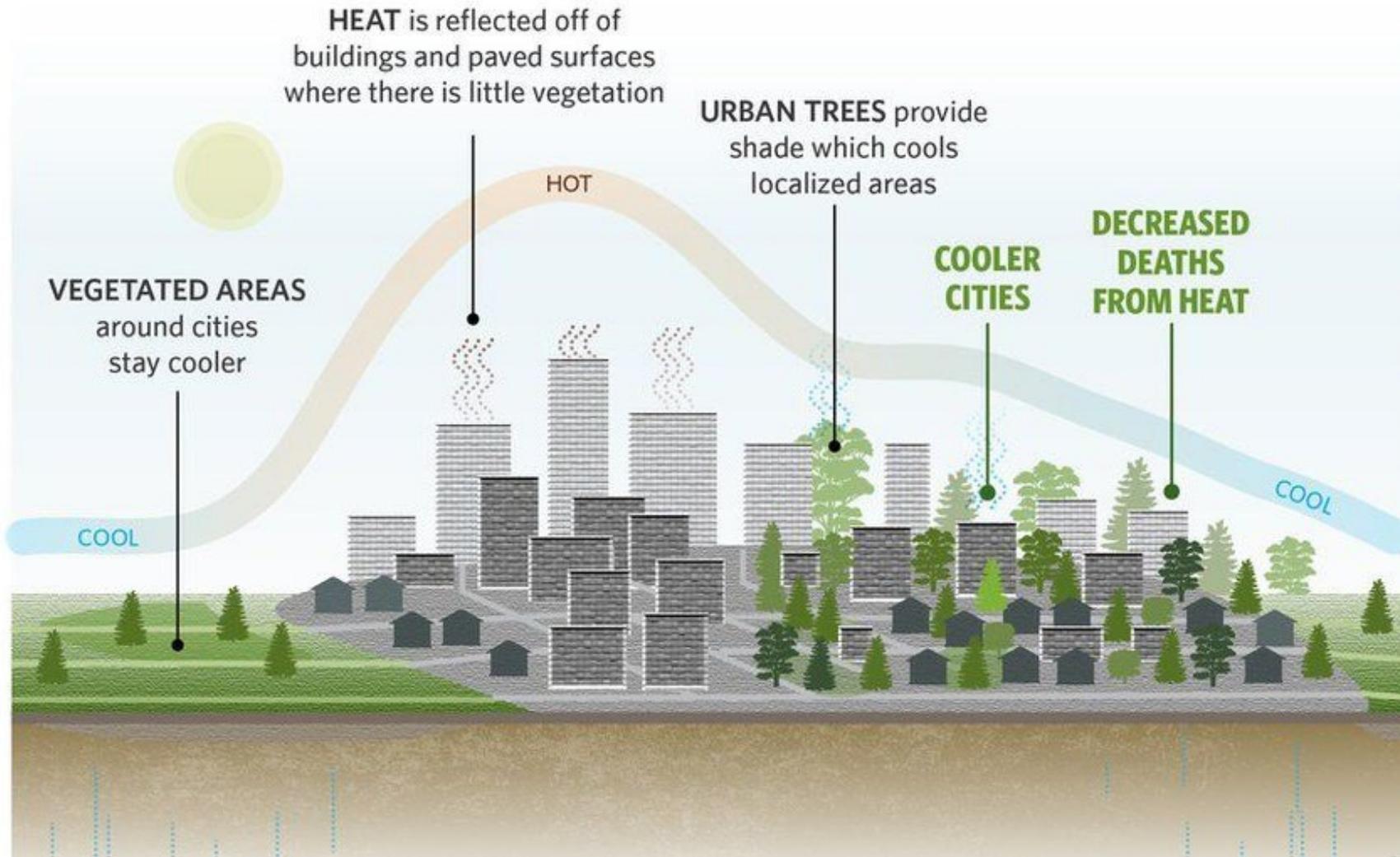
7 Roles of Trees in Urban Street Design

1. Define the street space.
2. Define the pedestrian space.
3. Calm traffic/separates pedestrian & cars.
4. Filter sunlight.
5. Bring order to street.
6. Visually soften streetscape.
7. Introduce nature.

(Victor Dover and John Massengale)

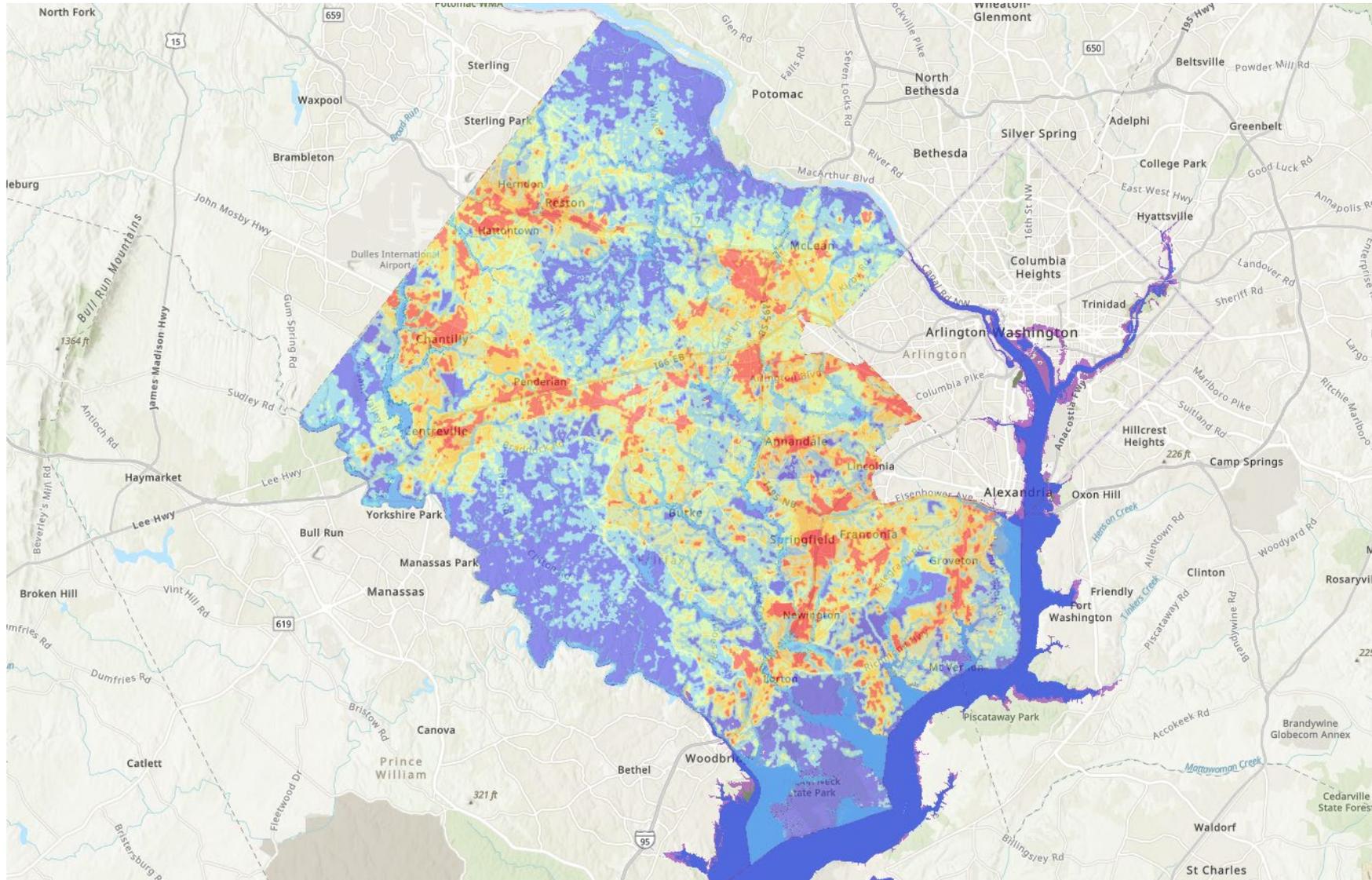


Urban Heat Island



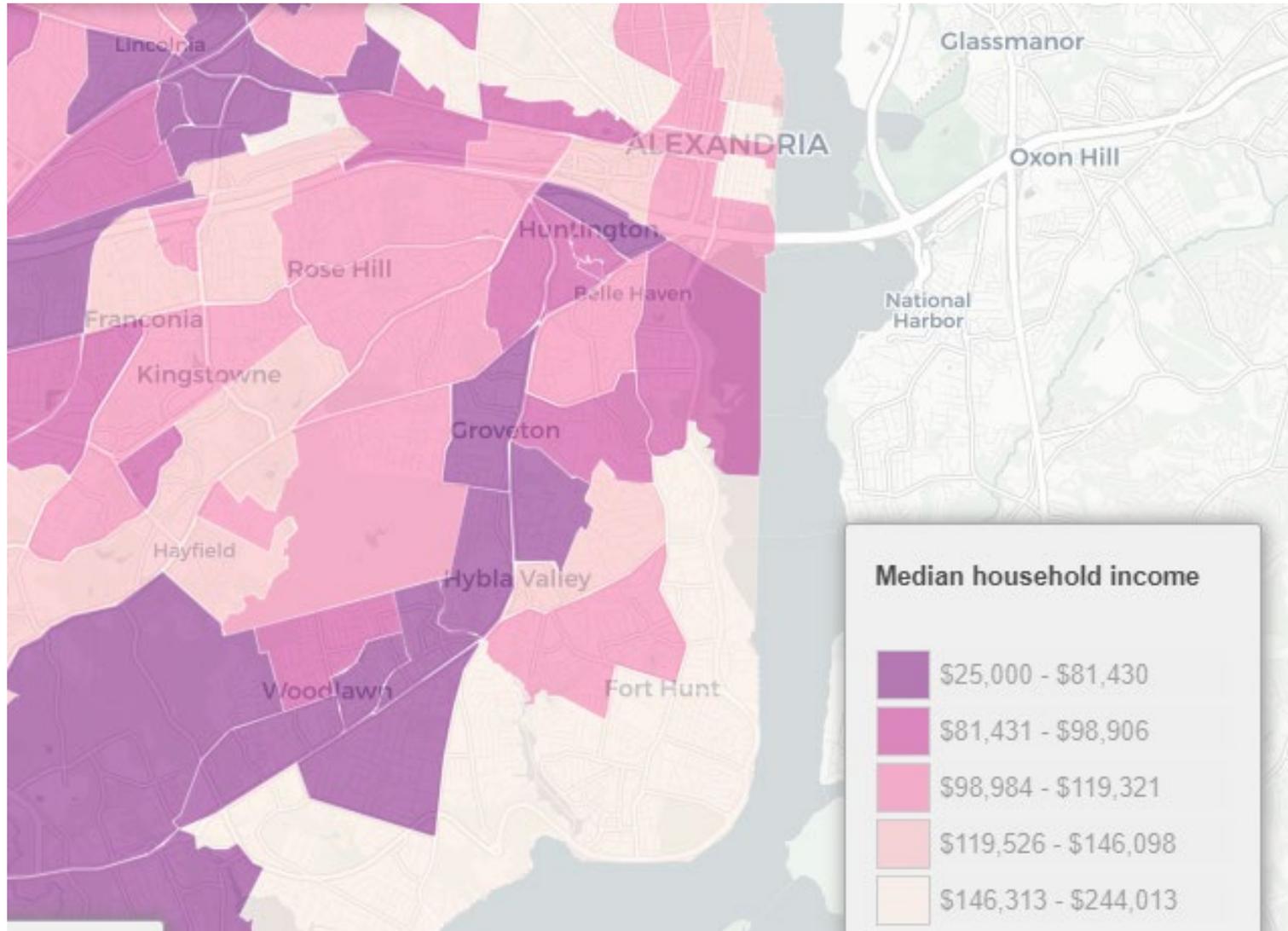
- Unshaded impervious surface increases urban heat island
- Increasing # of days > 95 degrees
- Disproportionate effect on lower income households
- CRDs have been left behind, higher rate of households without vehicles

Urban Heat Island - Fairfax County



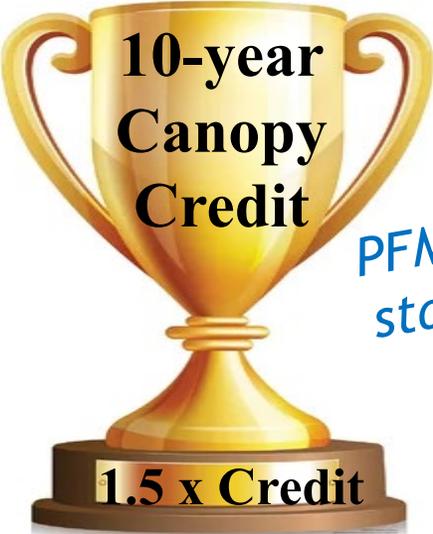
Hottest areas overlap areas where street trees changes would apply

Treeless Areas are Lower Income Areas



Ten-year Tree Canopy Credit for Trees in ROW

Incentive to follow current PFM standards



PFM 12-0310.4E standards met!

1st Place



Soil volume standards met, but other PFM provisions are not.

2nd Place



ALTERNATIVE TREE PLANTING STANDARD
Smaller planting area = less credit + more responsibility

3rd Place

Existing PFM Tree Planting Standard



Soil Volumes:

- 700 CF soil/tree
- 1200 CF soil/2 trees
- 1500 CF soil/tree for 3 trees.
Each additional tree in grouping requires an extra 500 cubic feet of soil.

Width: 8' min. (6' min. at surface)

Distance from curb (or any restrictive barrier): 4' min.

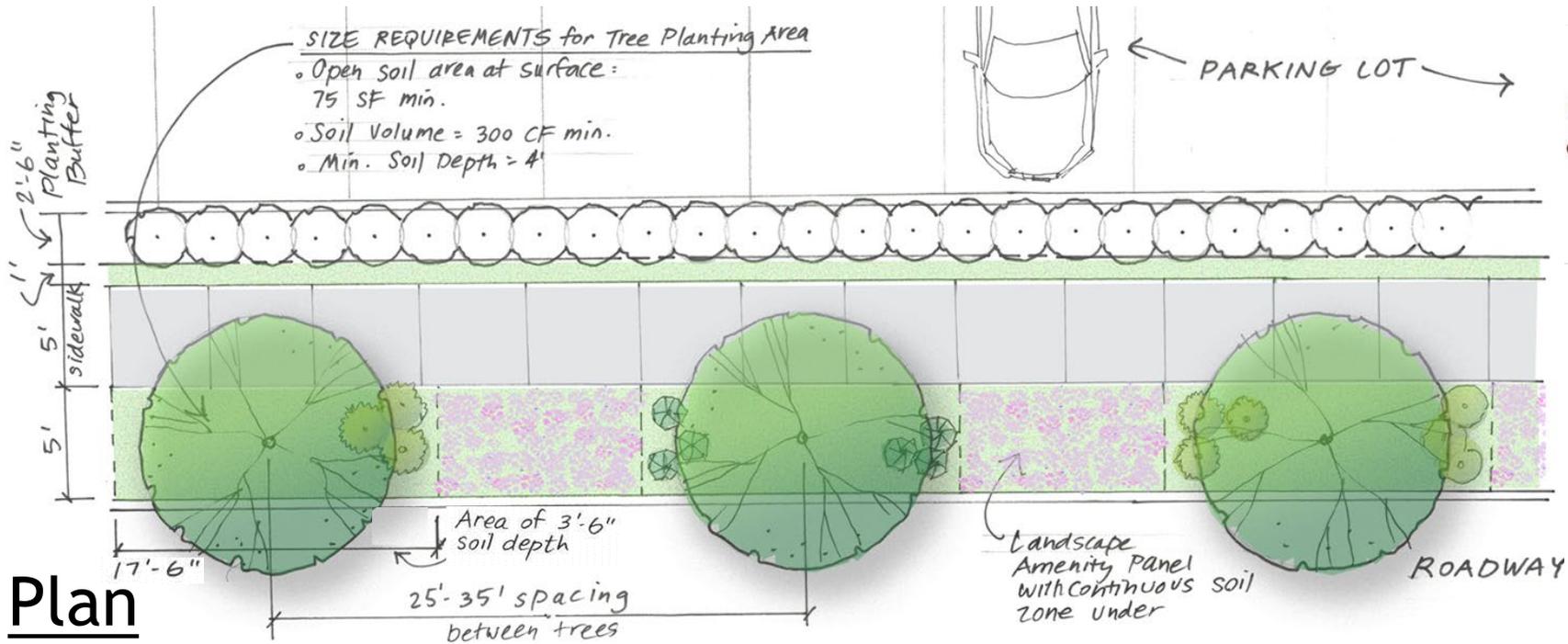


Key Features of the Alternative Standard

Trees planted in the right-of-way of the designated districts will now receive partial 10-year canopy credit if the following minimum conditions are met:

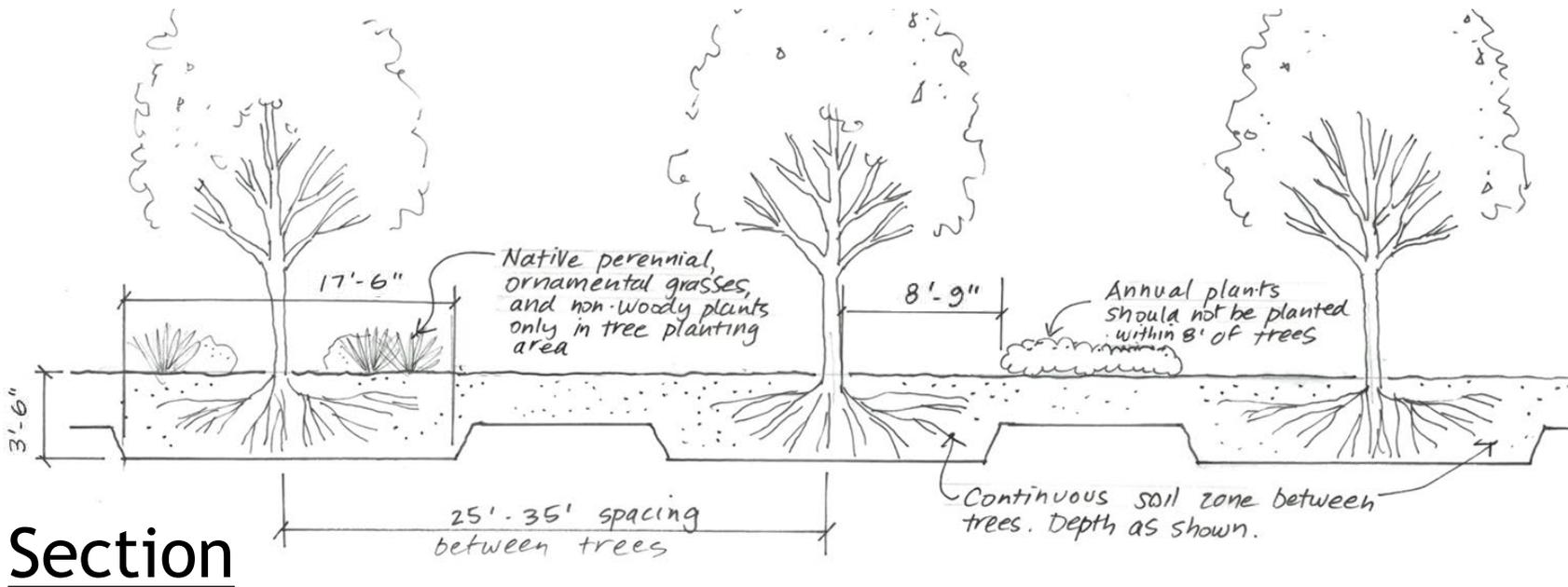
<u>Min Planting area</u>	<u>Soil volume</u>	<u>Tree species</u>	<u>Tree size</u>	<u>Maintenance</u>
5' wide x 17.5' long x 3.5' deep	<ul style="list-style-type: none">• 300 CF soil/tree• 75 SF open soil at surface	Per applicable Urban Design Guidelines	2.5" - 3.99" caliper	Perpetual maintenance & replacement

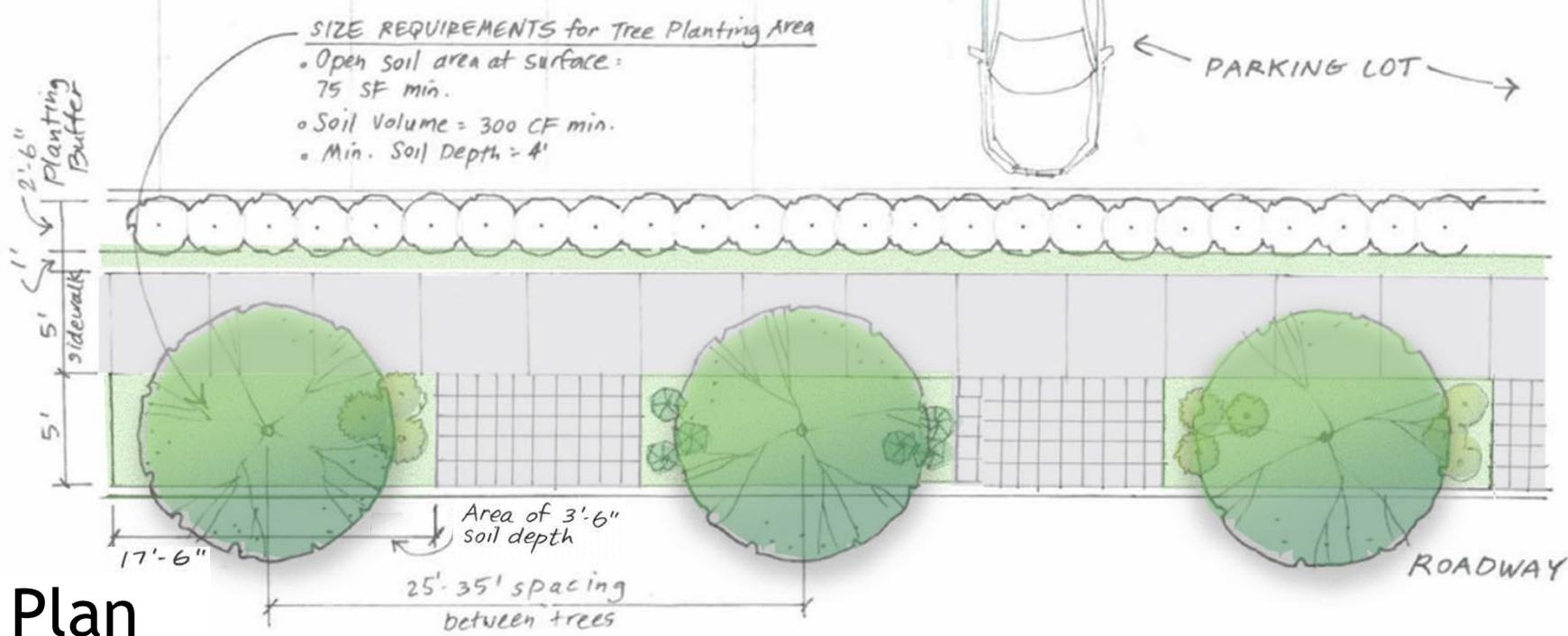
*** These are minimums and do not negate the current Comp Plan recommendations or Urban Street Standards**



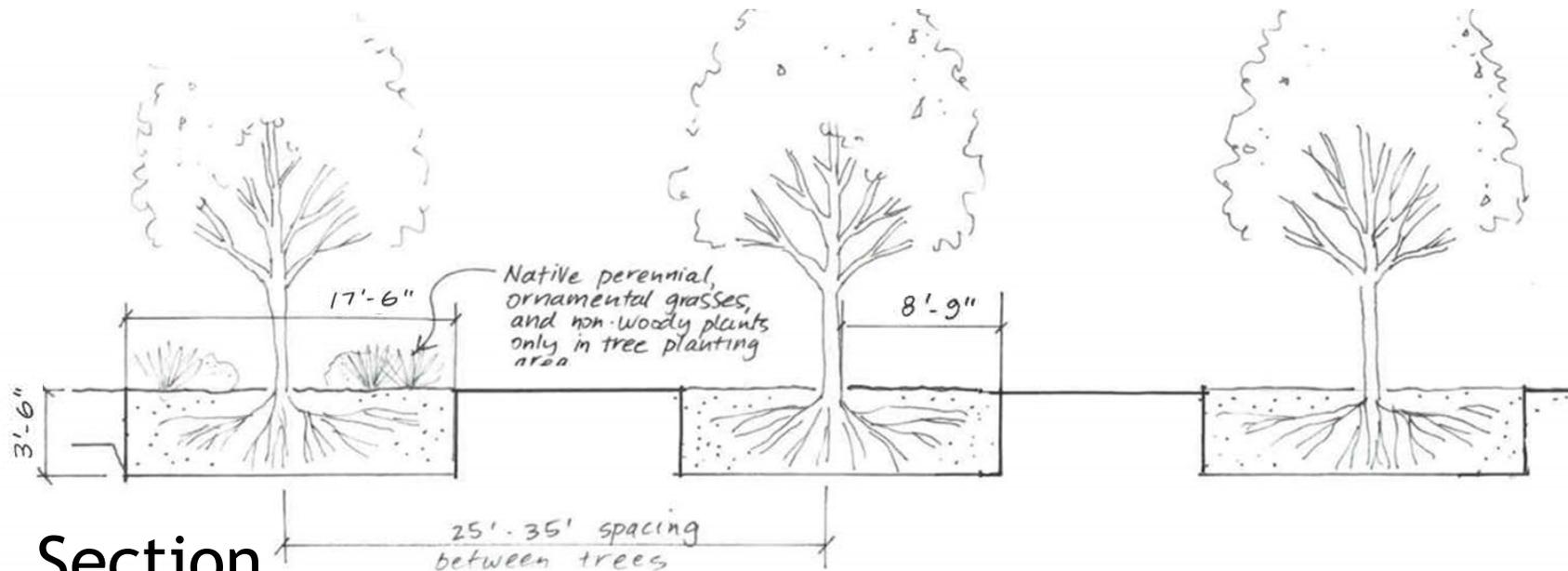
Soil volume standards met, but other PFM provisions are not.

2nd Place





Plan



Section



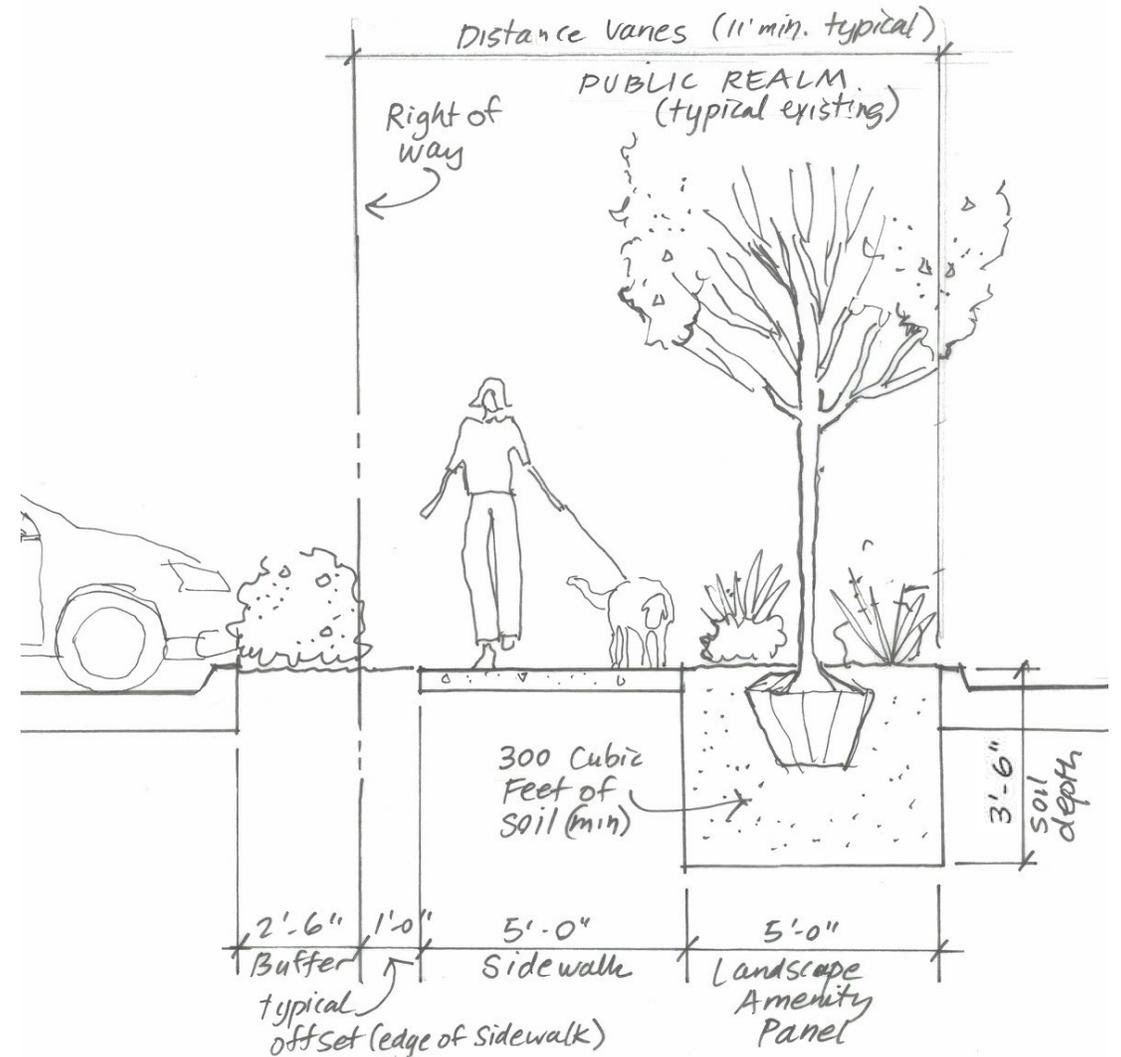
ALTERNATIVE TREE PLANTING STANDARD
 Smaller planting area = less credit + more responsibility

3rd Place

Example: Retrofit Site



Plan



Section

Challenges moving forward

- Enforcement of perpetual maintenance agreement
- Monitor potential ADA issues with sidewalks heaving
- Future project impacts (DOT and utility)
- Accessibility needs adjacent to on-street parking
- Limited species selection
- No stormwater credit for smaller tree planting areas
- Soil – high quality required

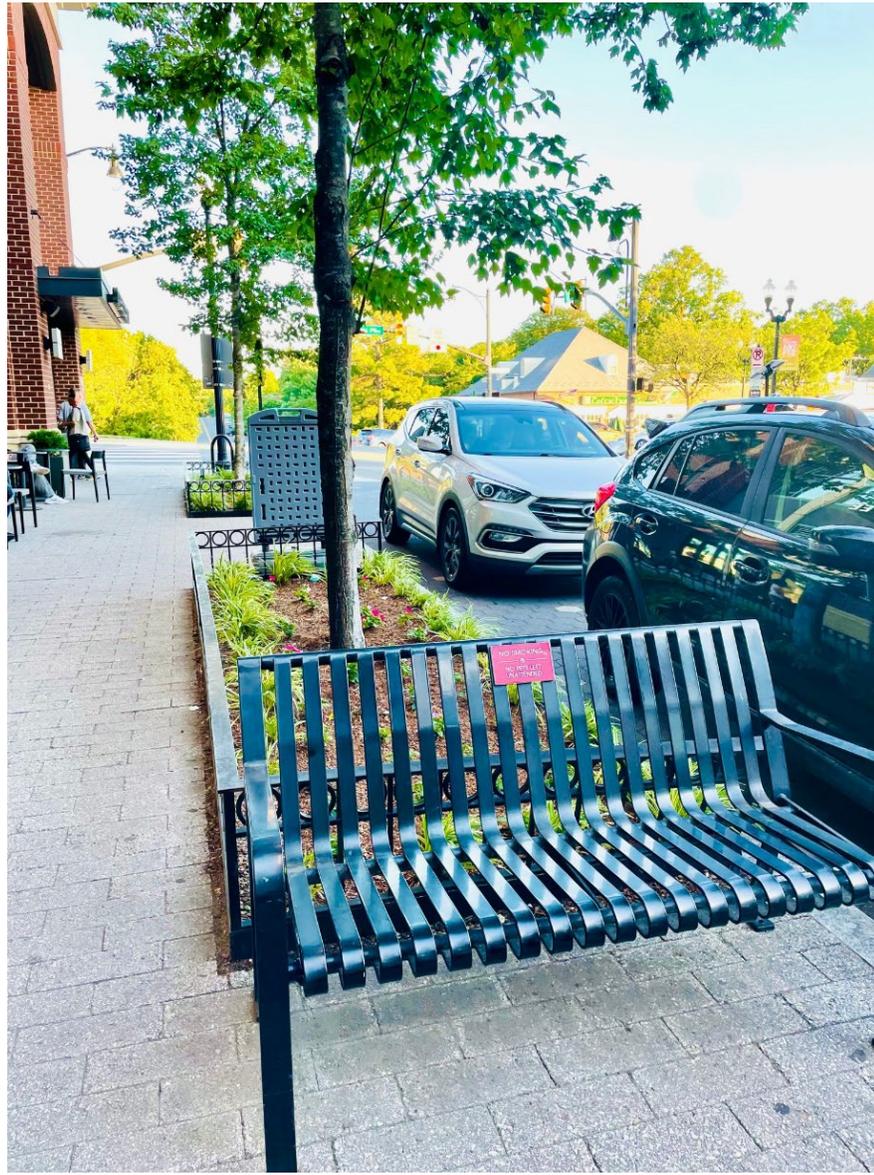
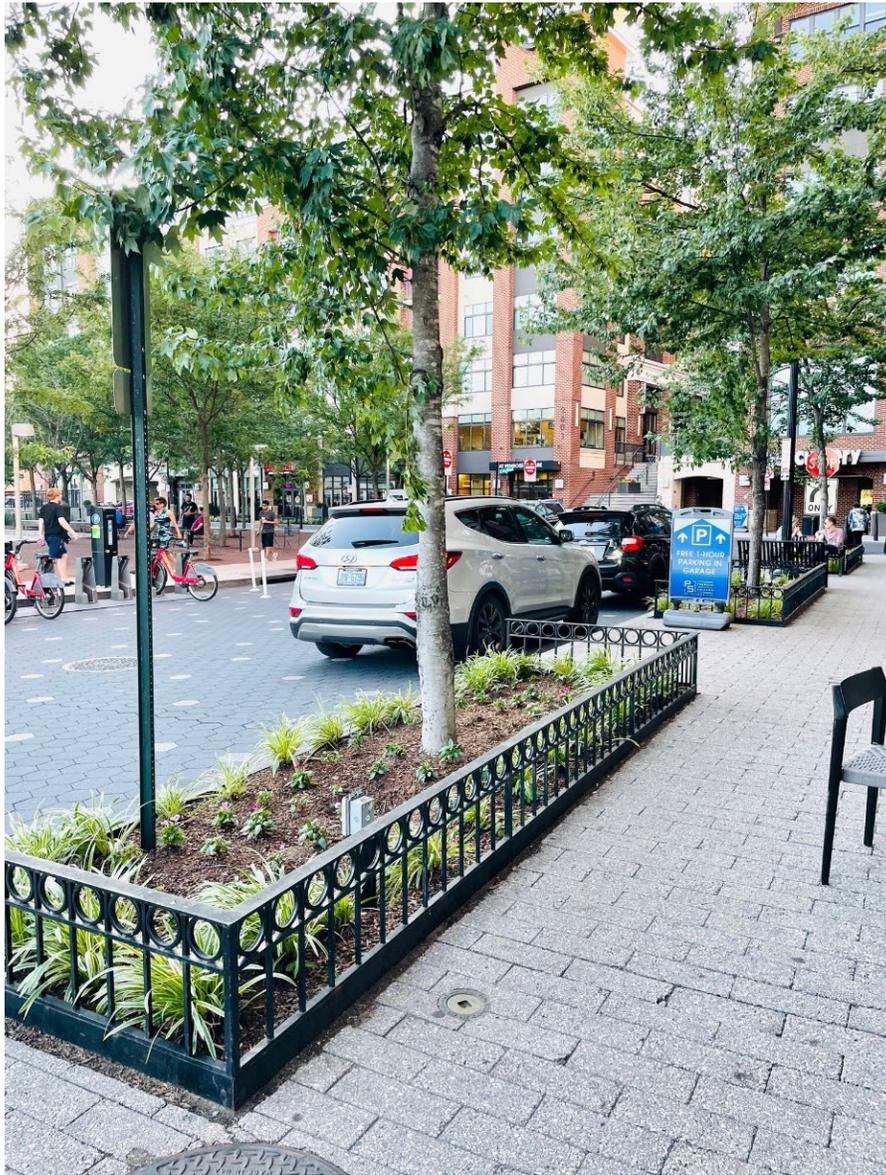
Next Steps

(Held 6 meetings with internal stakeholders on the proposed recommendations in June and July)

- External outreach – late summer/fall 2022
 - September 1 Tree Commission
 - September 7 DPAC
 - September 14 EQAC
 - September 15 NVBIA
 - September 29 Transportation Advisory Committee
 - October 6 Planning Commission Environment Committee
 - October 14 BOS Land Use Aides Meeting
- Prepare an amendment to the Urban Design Guidelines
- Present to Board of Supervisors (December 6)

Let's Look at Some Examples





5 x 17.5 feet

Assuming quality soil, this example would get 0.5 or 0.75 canopy credit (depending on species)

Penrose Apartments, Columbia Pike, Arlington County



X

Expand planter
box size to
5 x 17.5 feet
and
add good soil
= 0.50 or 0.75
credit
(depending on species)

Arlington County



Arlington County

X

Arlington County Minimum Planting Space Standard

4 feet x 8 feet

Expand planter box
to 5 x 17.5 feet
to receive
0.50 or 0.75 canopy
credit
(depending on species)



Arlington County



Current PFM Standards continue to work and will be incentivized

This is what we prefer, planting spaces that will work in the long run

Knowing that there are structural soil cells, this example would get 1.5x credit



Eisenhower area, City of Alexandria



Fairfax County

More Examples



Arlington County



What we are trying to avoid:

- Sidewalk lifting
- Damages to utilities
- Outgrowing Planting Spaces
- Unneeded risk to Public Spaces

Smaller planting spaces can work



Pickett Road/Blake Lane, City of Fairfax



6-foot wide
x
continuous
landscape
panel



Proposed Changes for Street Trees

Thank you