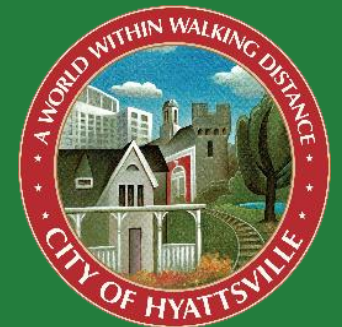


HYATTSVILLE, MARYLAND 2020 UTC ASSESSMENT & CHANGE ANALYSIS

MONDAY, OCTOBER 19TH, 2020

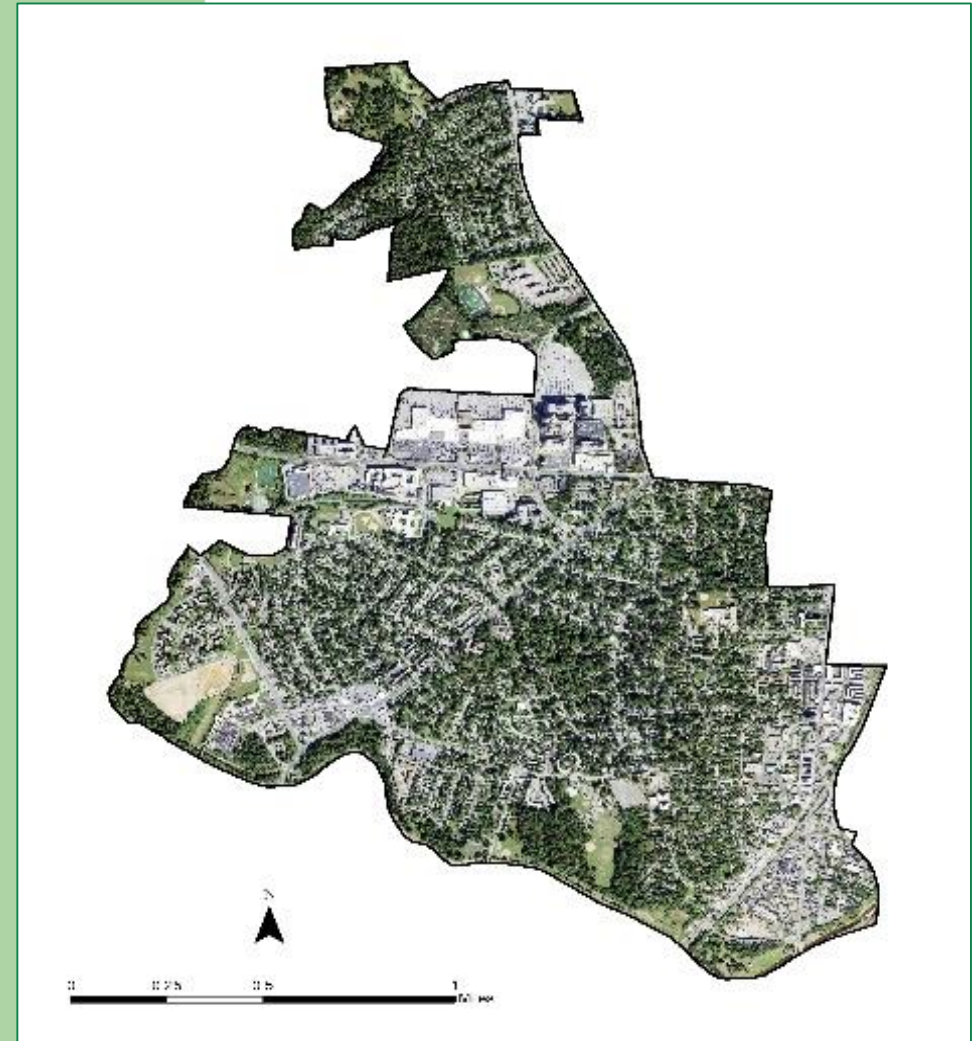


Presented by:
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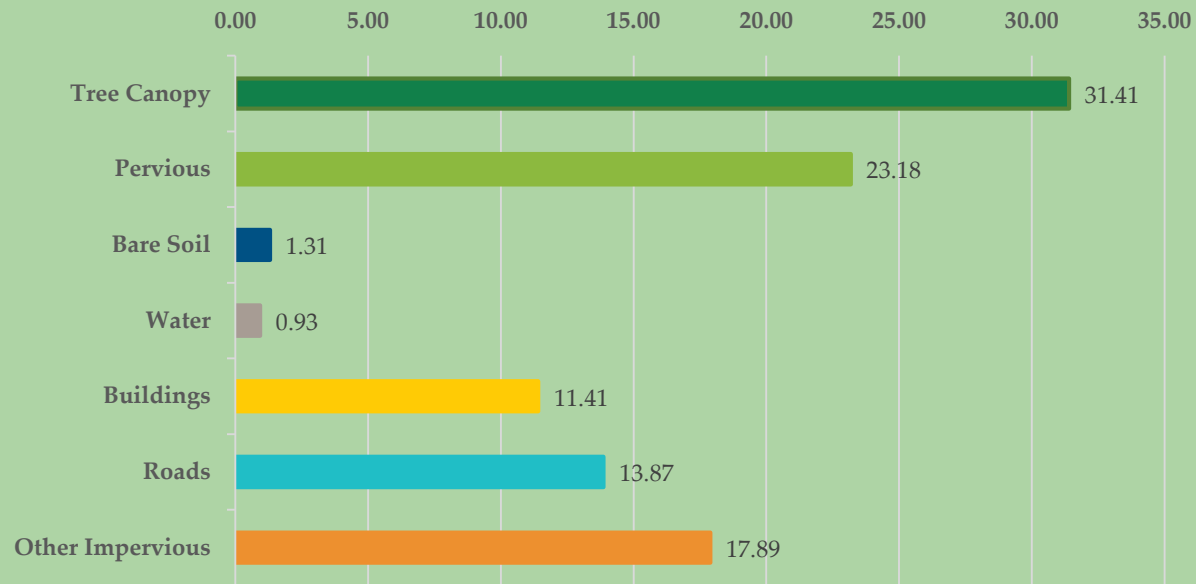
Project Background

- GIS-based analysis of Hyattsville's Urban Tree Canopy (UTC) using data from 2018
- Comparison with the city's UTC from 2009
- Multiple types and levels of analysis:
 - Land Cover
 - Land Use
 - Canopy Cover
 - Canopy Change
 - Parcels
 - Census Block Groups
 - Election Wards
 - Parks

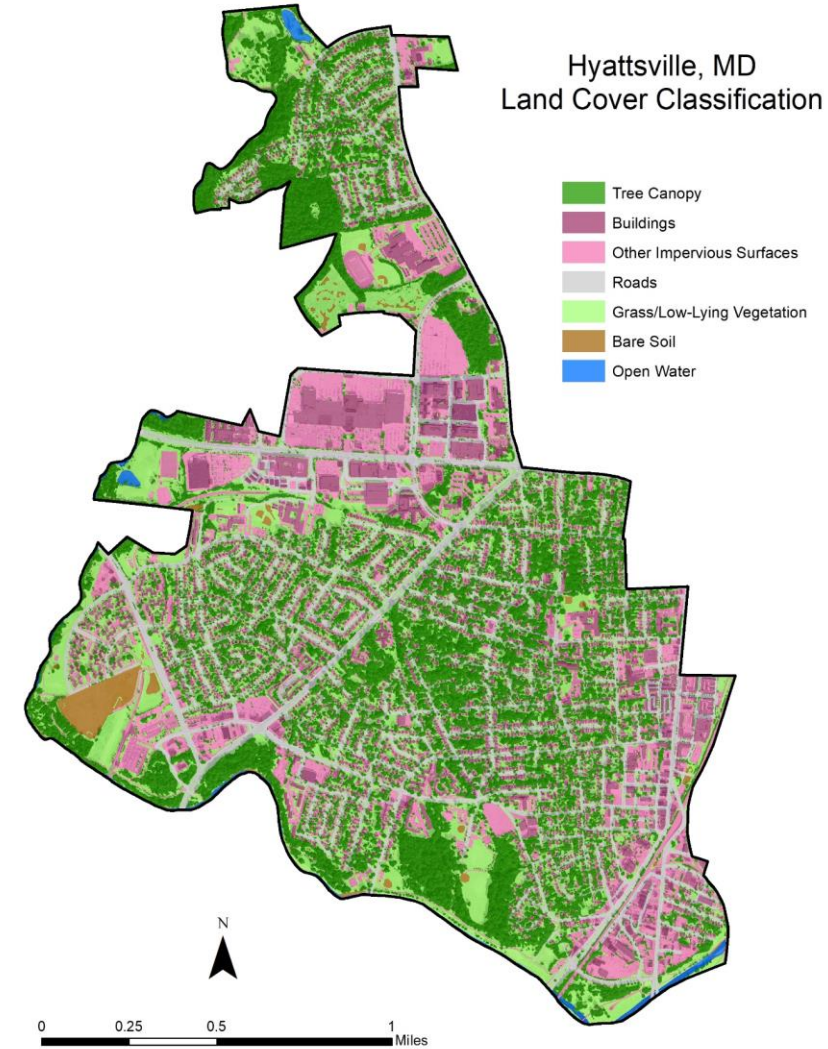


Land Cover Class

Hyattsville Land Cover

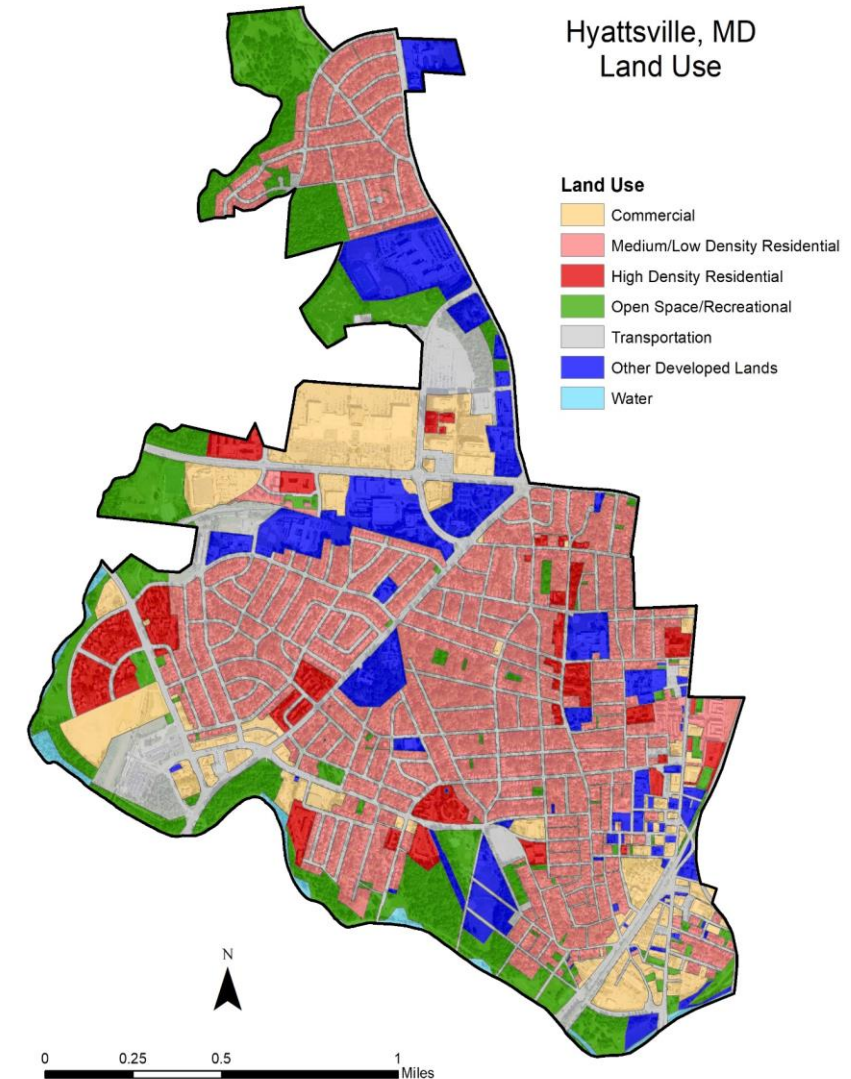


Hyattsville, MD
Land Cover Classification



Land Use

Land Use Classification	Total Acres	Existing UTC	
		Acres	%
Commercial	198	15	7%
High Density Residential	102	19	19%
Med/Low Density Residential	583	248	43%
Open Space/Recreational	257	134	52%
Other Developed Lands	200	46	23%
Transportation	388	79	20%
Water	17	7	42%
Total	1,746	548	31%



Canopy Change

	Canopy Acres	Canopy Coverage
Tree Canopy 2009	784.69	44.95%
Tree Canopy 2018	548.24	31.41%
Change Over Time	-236.46	-13.54%
	30.12% Decrease	

Reasons for Canopy Loss:

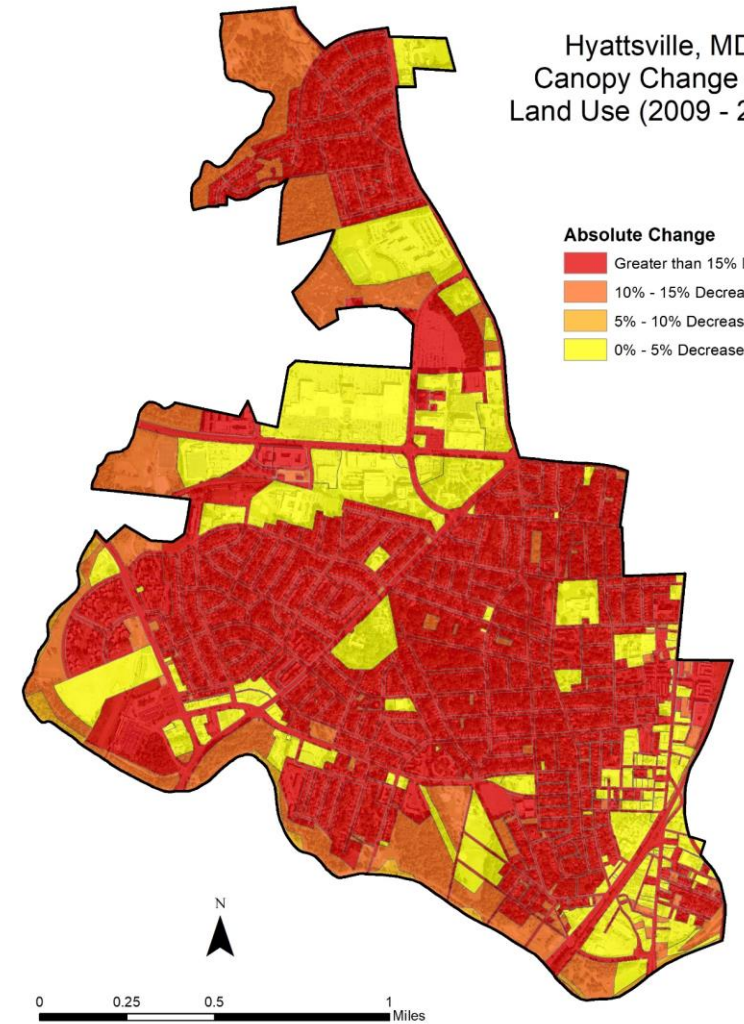
- Land Development
- Emerald Ash Borer
- Natural Loss of Mature Canopy
- Removals by Individual Private Landowners

Change by Land Use

Hyattsville, MD
Canopy Change by
Land Use (2009 - 2018)

Absolute Change

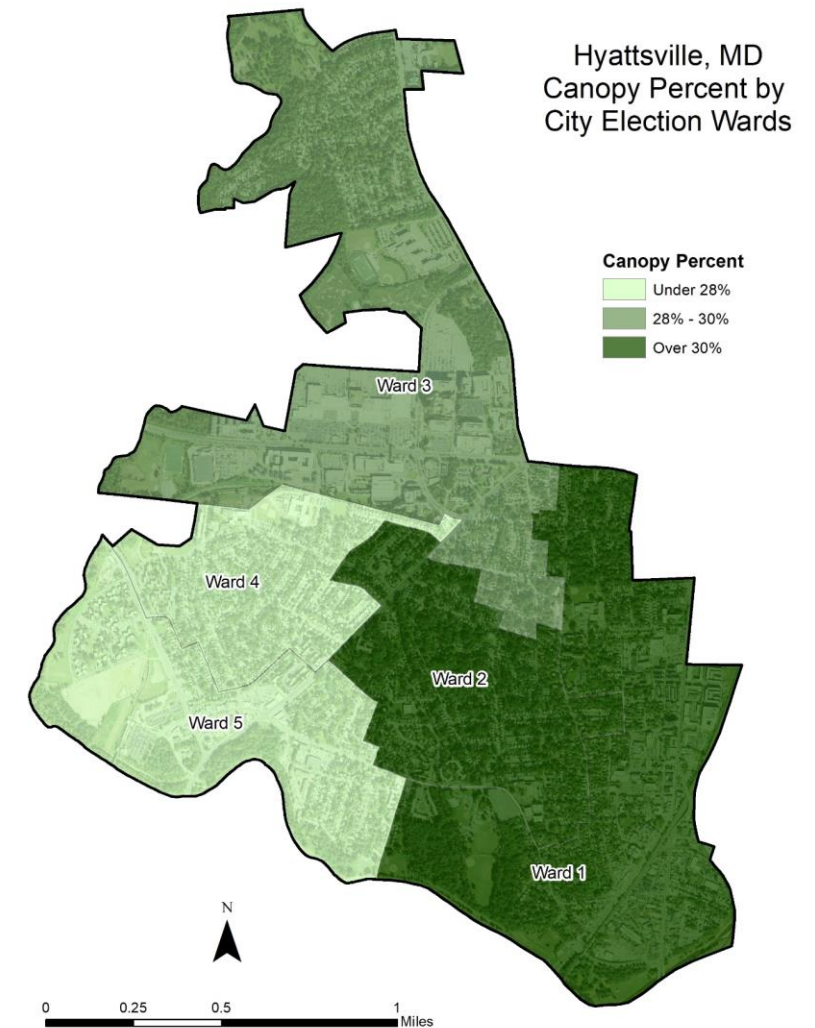
- Greater than 15% Decrease
- 10% - 15% Decrease
- 5% - 10% Decrease
- 0% - 5% Decrease



Land Use Classification	Total Acres	Canopy Coverage					
		2018		2009		Change	
		Acres	%	Acres	%	Acres	%
Commercial	198	15	7%	23	11%	-8	-35%
High Density Residential	102	19	19%	35	35%	-16	-46%
Med/Low Density Residential	583	248	43%	355	61%	-107	-30%
Open Space/Recreational	257	134	52%	169	66%	-35	-21%
Other Developed Lands	200	46	23%	55	28%	-9	-16%
Transportation	388	79	20%	138	36%	-59	-43%
Water	17	7	42%	9	50%	-2	-22%
Total	1,746	548		785		-236	-30%

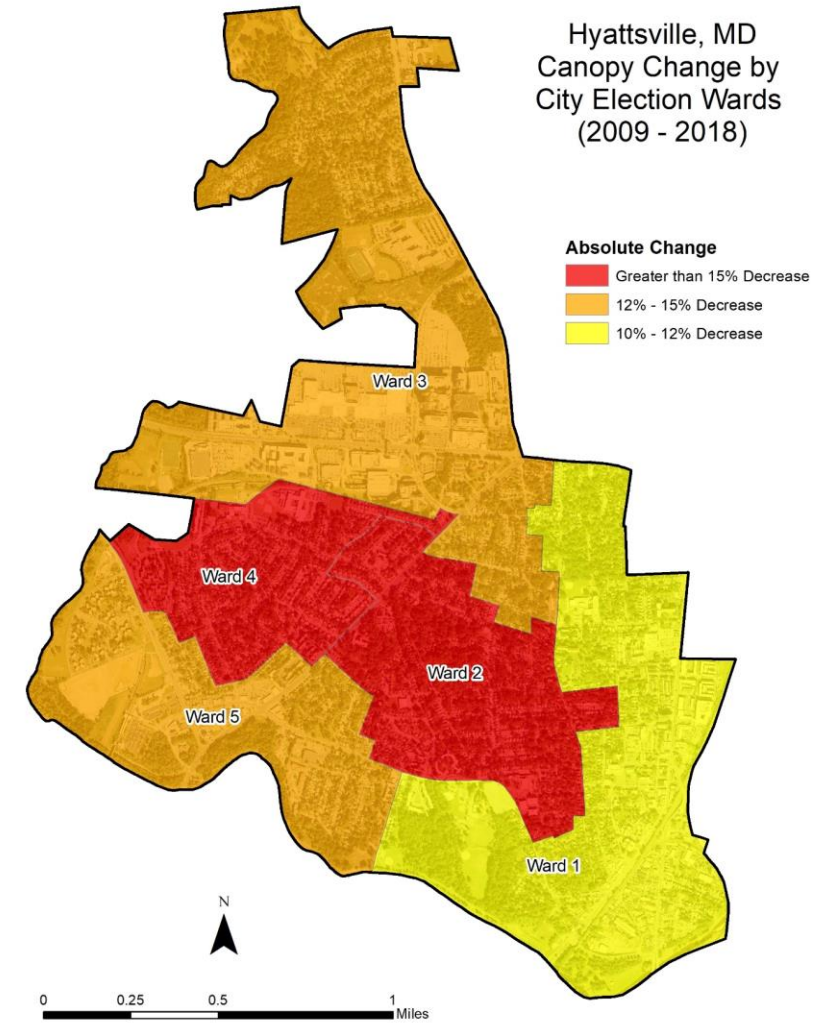
Election Wards

- Ward 2 has the highest level of UTC (43% canopy coverage).
- Ward 3 contains the highest gross acreage of canopy (174 acres).
- Ward 4 has the smallest amount of UTC both in terms of gross acreage (49 acres) and level of UTC (28%).



Election Wards

- From 2009–2018, all five election wards experienced a double digit decrease in canopy coverage.
- The largest decline in UTC came in Ward 4, dropping by 19 percentage points from 47% in 2009 to 28% in 2018.
- The smallest decrease in tree canopy came in Ward 1, losing 46 canopy acres which dropped coverage from 41% to 31%.



Tree Benefits

Ecosystem Benefits	Annual Ecosystem Benefits	
	Quantity	Value
Air: CO (carbon monoxide) removed	934 lbs	\$510
Air: NO ₂ (nitrogen dioxide) removed	6,593 lbs	\$778
Air: O ₃ (ozone) removed	26,358 lbs	\$17,073
Air: SO ₂ (sulfur dioxide) removed	2,019 lbs	\$74
Air: PM ₁₀ particulate matter (dust, soot, etc.) removed	5,439 lbs	\$11,707
Carbon sequestered	740 tons	\$63,085
Current stored carbon	18,579 tons	\$1,584,301
Stormwater: reduction in runoff	7,944,801 gals	\$1,350,616
Total Annual Benefits		\$3,028,144

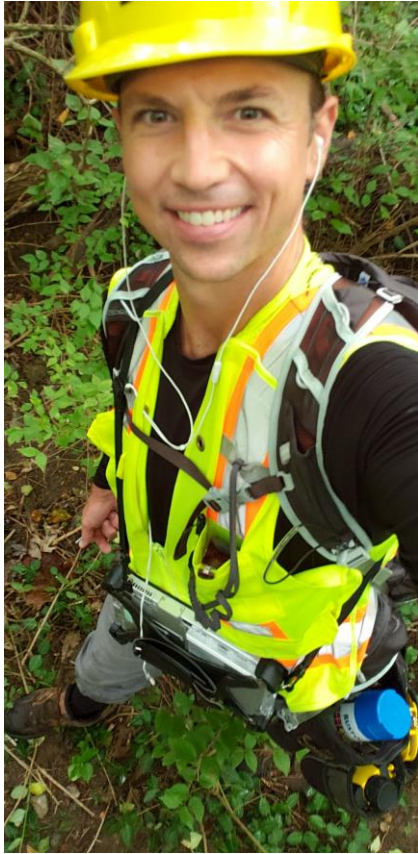


Looking Forward

UTC	Acres	Percentage
Existing	548	31.41%
Possible	392	22.46%
Maximum	940	53.87%



- Young, newly planted trees will mature
- Planting initiatives to expand canopy
- Utilize TreeKeeper and CanopyKeeper to identify new planting locations that will maximize tree benefits



Thank you!

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