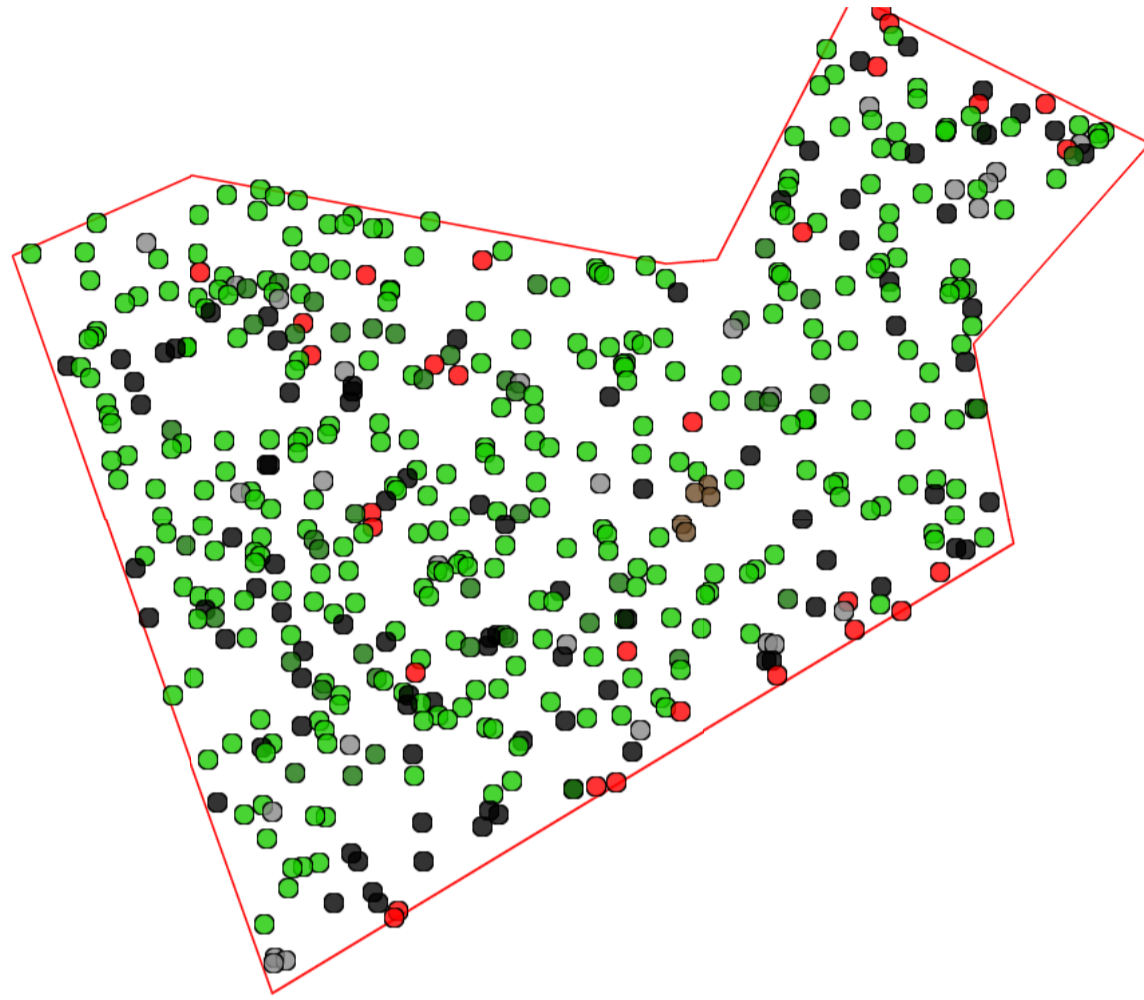


i-Tree Canopy v7.1

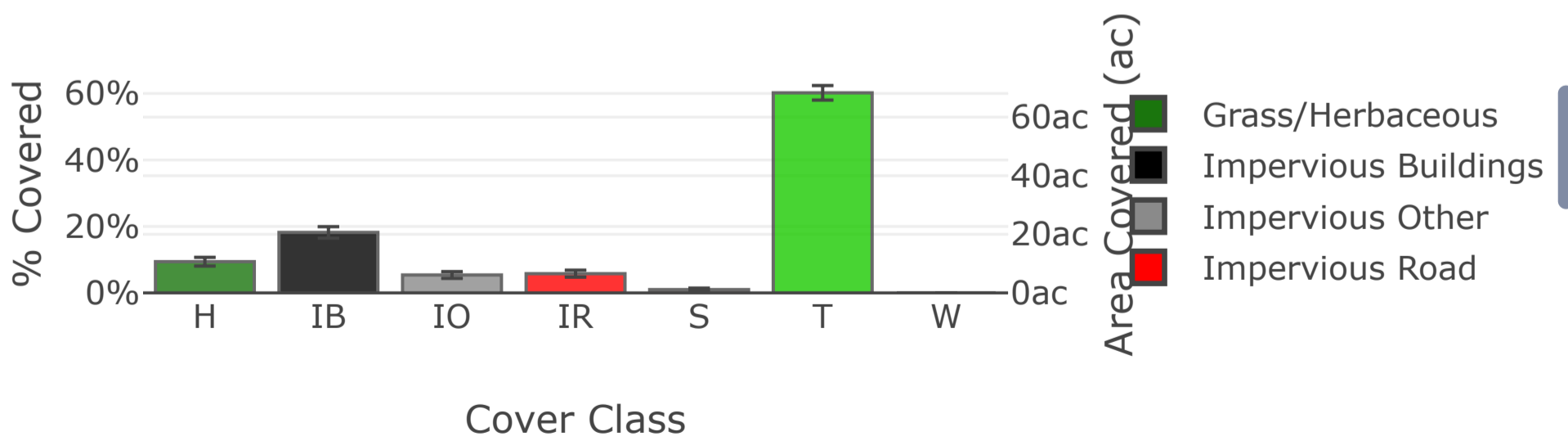
Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 5/28/2021



Google

Land Cover



Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
H	Grass/Herbaceous		47	9.40 ± 1.31	10.66 ± 1.48
IB	Impervious Buildings		91	18.20 ± 1.73	20.64 ± 1.96
IO	Impervious Other		27	5.40 ± 1.01	6.13 ± 1.15
IR	Impervious Road		29	5.80 ± 1.05	6.58 ± 1.19
S	Soil/Bare Ground		5	1.00 ± 0.45	1.13 ± 0.51
T	Tree/Shrub		301	60.20 ± 2.19	68.29 ± 2.48
W	Water		0	0.00 ± 0.00	0.00 ± 0.00
Total			500	100.00	113.43

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO ₂ Equiv. (T)	±SE	Value (USD)	±SE
Sequestered annually in trees	73.11	±2.66	268.07	±9.75	\$12,469	±453
Stored in trees (Note: this benefit is not an annual rate)	2,340.96	±85.12	8,583.52	±312.12	\$399,253	±14,518

Currency is in USD and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Amount sequestered is based on 1.071 T of Carbon, or 3.926 T of CO₂, per ac/yr and rounded. Amount stored is based on 34.281 T of Carbon, or 125.697 T of CO₂, per ac and rounded. Value (USD) is based on \$170.55/T of Carbon, or \$46.51/T of CO₂ and rounded. (English units: T = tons (2,000 pounds), ac = acres)

Tree Benefit Estimates: Air Pollution (English units)

Abbr.	Description	Amount (lb)	±SE	Value (USD)	±SE
CO	Carbon Monoxide removed annually	87.19	±3.17	\$58	±2
NO ₂	Nitrogen Dioxide removed annually	813.56	±29.58	\$333	±12
O ₃	Ozone removed annually	3,703.74	±134.68	\$12,934	±470
SO ₂	Sulfur Dioxide removed annually	202.22	±7.35	\$28	±1
PM _{2.5}	Particulate Matter less than 2.5 microns removed annually	132.57	±4.82	\$24,878	±905
PM ₁₀ *	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	513.13	±18.66	\$1,608	±58
Total		5,452.41	±198.27	\$39,839	±1,449

Currency is in USD and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Air Pollution Estimates are based on these values in lb/ac/yr @ \$/lb/yr and rounded:

CO 1.277 @ \$0.67 | NO₂ 11.914 @ \$0.41 | O₃ 54.238 @ \$3.49 | SO₂ 2.961 @ \$0.14 | PM_{2.5} 1.941 @ \$187.66 | PM₁₀* 7.514 @ \$3.13 (English units: lb = pounds, ac = acres)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (Mgal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	1.39	±0.05	\$12,457	±453
E	Evaporation	4.04	±0.15	N/A	N/A
I	Interception	4.05	±0.15	N/A	N/A
T	Transpiration	9.42	±0.34	N/A	N/A
PE	Potential Evaporation	43.30	±1.57	N/A	N/A
PET	Potential Evapotranspiration	32.91	±1.20	N/A	N/A

Currency is in USD and rounded. Standard errors of removal and benefit amounts are based on standard errors of sampled and classified points. Hydrological Estimates are based on these values in Mgal/ac/yr @ \$/Mgal/yr and rounded:

AVRO 0.020 @ \$8,936.00 | E 0.059 @ N/A | I 0.059 @ N/A | T 0.138 @ N/A | PE 0.634 @ N/A | PET 0.482 @ N/A (English units: Mgal = millions of gallons, ac = acres)

About i-Tree Canopy

The concept and prototype of this program were developed by David J. Nowak, Jeffery T. Walton, and Eric J. Greenfield (USDA Forest Service). The current version of this program was developed and adapted to i-Tree by David Ellingsworth, Mike Binkley, and Scott Maco (The Davey Tree Expert Company)

Limitations of i-Tree Canopy

The accuracy of the analysis depends upon the ability of the user to correctly classify each point into its correct class. As the number of points increase, the precision of the estimate will increase as the standard error of the estimate will decrease. If too few points are classified, the standard error will be too high to have any real certainty of the estimate.



Additional support provided by:



Use of this tool indicates acceptance of the [EULA](#).