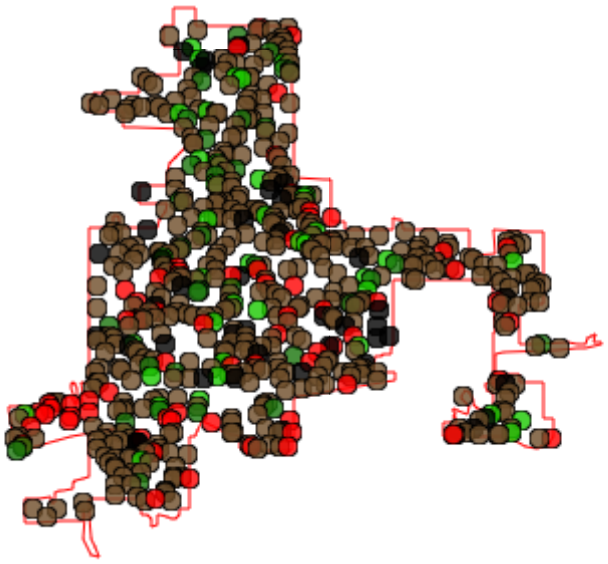
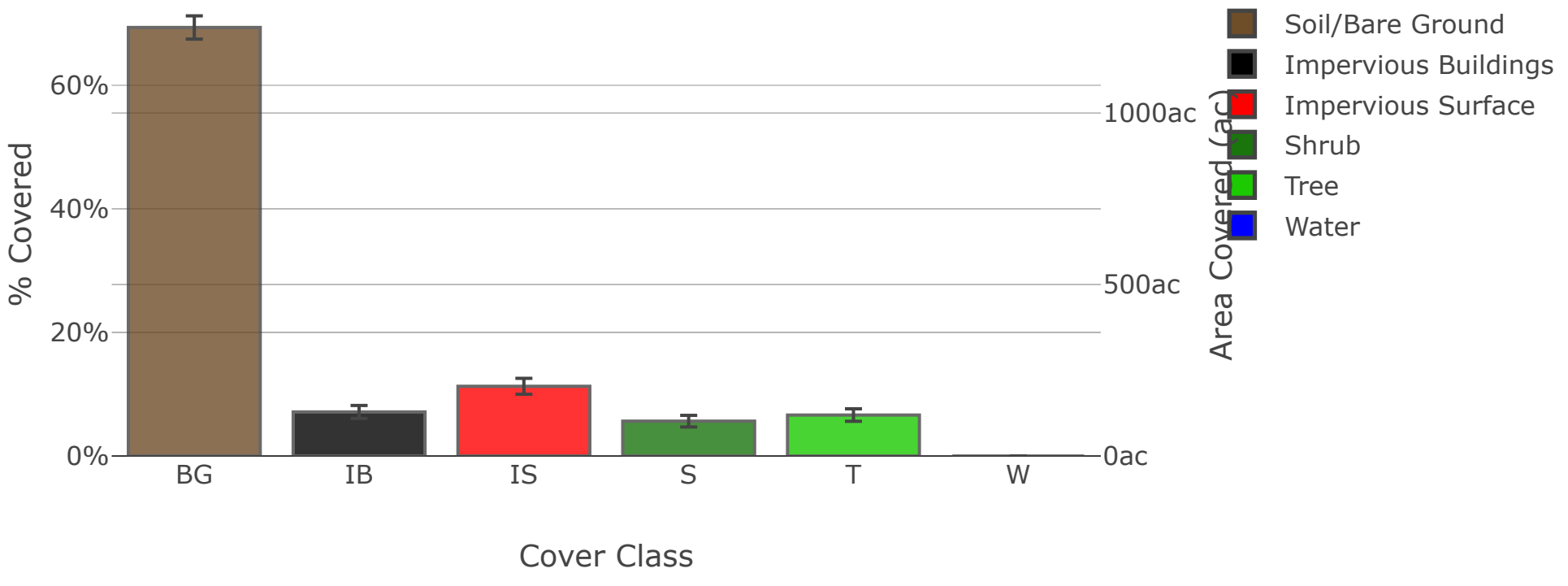
i-Tree Canopy v7.1

Cover Assessment and Tree Benefits Report

Estimated using random sampling statistics on 6/2/2021



Land Cover



Abbr.	Cover Class	Description	Points	% Cover ± SE	Area (ac) ± SE
BG	Soil/Bare Ground		418	69.32 ± 1.88	1249.90 ± 33.86
IB	Impervious Buildings		43	7.13 ± 1.05	128.58 ± 18.90
IS	Impervious Surface		68	11.28 ± 1.29	203.33 ± 23.23
S	Shrub		34	5.64 ± 0.94	101.67 ± 16.94
T	Tree		40	6.63 ± 1.01	119.61 ± 18.27
W	Water		0	0.00 ± 0.00	0.00 ± 0.00
Total			**603**	**100.00**	**1803.08**

Tree Benefit Estimates: Carbon (English units)

Description	Carbon (T)	±SE	CO_2 Equiv. (T)	±SE	Value (USD)	±SE
Sequestered annually in trees	163.27	±24.94	598.65	±91.46	$27,845	±4,254
Stored in trees (Note: this benefit is not an annual rate)	4,100.27	±626.44	15,034.32	±2,296.94	$699,304	±106,839

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 1.365 T of Carbon, or 5.005 T of CO_2, per ac/yr and rounded. Amount stored is based on 34.281 T of Carbon, or 125.697 T of CO_2, per ac and rounded. Value (USD) is based on $170.55/T of Carbon, or $46.51/T of CO_2 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	135.13	±20.64	$90	±14
NO2	Nitrogen Dioxide removed annually	746.50	±114.05	$163	±25
O3	Ozone removed annually	5,766.44	±880.99	$7,490	±1,144
SO2	Sulfur Dioxide removed annually	366.97	±56.06	$25	±4
PM2.5	Particulate Matter less than 2.5 microns removed annually	294.59	±45.01	$15,681	±2,396
PM10*	Particulate Matter greater than 2.5 microns and less than 10 microns removed annually	1,636.64	±250.04	$5,130	±784
Total		**8,946.25**	**±1,366.80**	**$28,578**	**±4,366**

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 1.130 @ $0.67 | NO2 6.241 @ $0.22 | O3 48.211 @ $1.30 | SO2 3.068 @ $0.07 | PM2.5 2.463 @ $53.23 | PM10* 13.683 @ $3.13 (English units: lb = pounds, ac = acres)

Tree Benefit Estimates: Hydrological (English units)

Abbr.	Benefit	Amount (gal)	±SE	Value (USD)	±SE
AVRO	Avoided Runoff	990.75	±151.37	$9	±1
E	Evaporation	22,248.54	±3,399.12	N/A	N/A
I	Interception	22,393.34	±3,421.25	N/A	N/A
T	Transpiration	21,067.50	±3,218.69	N/A	N/A
PE	Potential Evaporation	143,084.61	±21,860.42	N/A	N/A
PET	Potential Evapotranspiration	118,007.76	±18,029.19	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 gal/ac/yr @ $/gal/yr and rounded:
AVRO 8.283 @ $0.01 | E 186.013 @ N/A | I 187.224 @ N/A | T 176.139 @ N/A | PE 1,196.288 @ N/A | PET 986.628 @ N/A (English units: gal = 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: