



Total Projected Benefits (2019-2039) - Over the next 20 years, based on forecasted tree growth, i-Tree Design projects total benefits worth \$28,830:

- \$22,925 of stormwater runoff savings by intercepting 2,315,620 gallons of rainfall
- \$480 of air quality improvement savings by absorbing and intercepting pollutants such as ozone, sulfur dioxide, nitrogen dioxide, and particulate matter; reducing energy production needs; and lowering air temperature
- \$3,782 of savings by reducing 162,616 lbs. of atmospheric carbon dioxide through CO₂ sequestration and decreased energy production needs and emissions
- \$1,934 of summer energy savings by direct shading and air cooling effect through evapotranspiration
- \$-291 of winter energy savings by slowing down winds and reducing home heat loss

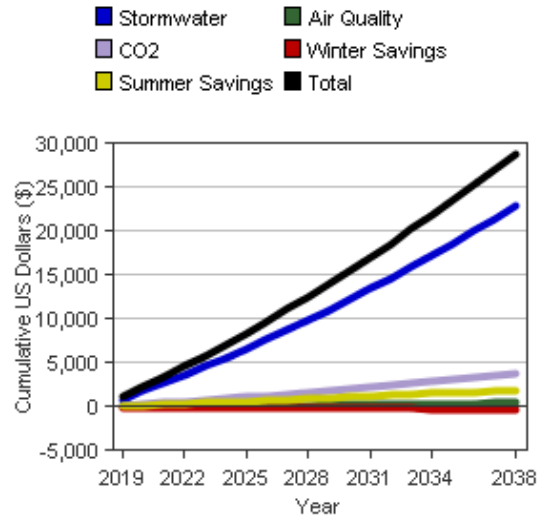


Figure 1. Tree benefit forecast for 20 years

- Stormwater
- Air Quality
- Winter Savings
- CO2
- Summer Savings

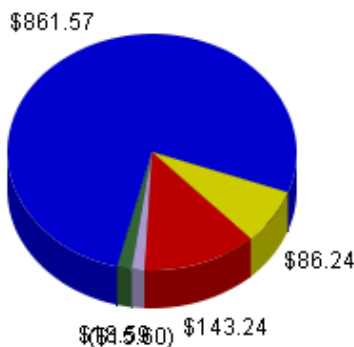


Figure 2. Annual tree benefits for 2019

Current Year - For 2019, i-Tree Design estimates annual tree benefits of \$1,094.03:

- \$861.57 of stormwater runoff savings by intercepting 87,029 gallons of rainfall
- \$18.59 of air quality improvement savings
- \$143.24 of carbon dioxide reduction savings
- \$86.24 of summer energy savings
- \$-15.60 of winter energy savings

A cooperative initiative between:



Future Year - In the year 2039, based on forecasted tree growth, i-Tree Design projects annual benefits of \$1,833.91:

- \$1,478.36 of stormwater runoff savings by intercepting 149,329 gallons of rainfall
- \$30.07 of air quality improvement savings
- \$238.59 of carbon dioxide reduction savings
- \$102.67 of summer energy savings
- \$-15.79 of winter energy savings

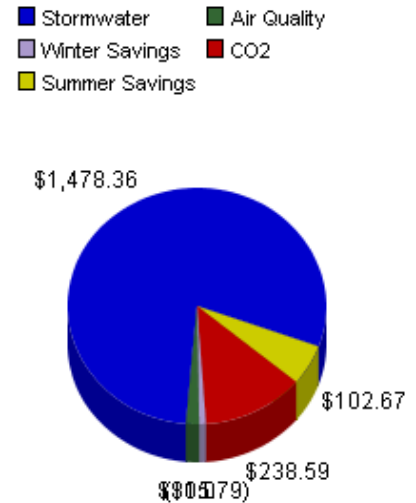


Figure 3. Annual tree benefits for the year 2039

- Stormwater
- Air Quality
- Winter Savings
- CO2
- Summer Savings

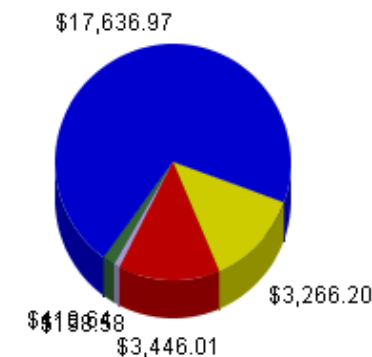


Figure 4. Total benefits to date

Total Benefits to Date - Over the life of the tree(s) so far, i-Tree Design calculates total benefits worth \$24,966:

- \$17,637 of stormwater runoff savings by intercepting 1,781,521 gallons of rainfall
- \$419 of air quality improvement savings
- \$3,446 of carbon dioxide reduction savings
- \$3,266 of summer energy savings
- \$199 of winter energy savings

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Individual Tree Benefits

Tree	DBH (in)	Condition	Location to Structure	Benefits			
				Current Year (2019)	Future Year (2039)	Projected Total (2019-2039)	Total to Date
1. Shumard oak	17	Excellent	Northwest (95 ft)	\$47.09	\$114.60	\$1,549	\$490
2. Common crabapple	7	Excellent	Northwest (89 ft)	\$6.89	\$27.09	\$307	\$36
3. Shumard oak	25	Excellent	Northwest (62 ft)	\$95.05	\$173.11	\$2,612	\$1,482
4. Common crapemyrtle	5	Good	West (8 ft)	\$7.85	\$16.08	\$252	\$46
5. Water oak	27	Good	Southwest (51 ft)	\$123.71	\$239.56	\$3,565	\$1,541
6. Water oak	25	Good	Southwest (91 ft)	\$102.67	\$216.55	\$3,111	\$1,121
7. Water oak	25	Good	Southwest (89 ft)	\$102.67	\$216.55	\$3,111	\$1,121
8. Common crapemyrtle	7	Good	Southwest (88 ft)	\$4.94	\$11.42	\$164	\$18
9. Common crapemyrtle	6.5	Good	South (61 ft)	\$4.52	\$11.18	\$157	\$16
10. Common crapemyrtle	7	Good	West (3 ft)	\$12.64	\$17.87	\$302	\$88
11. Common crapemyrtle	7	Good	Southwest (2 ft)	\$4.84	\$8.44	\$129	\$13
12. Common crapemyrtle	7	Good	Southwest (1 ft)	\$4.84	\$8.44	\$129	\$13
13. Common crapemyrtle	6	Good	Southwest (1 ft)	\$1.86	\$7.76	\$113	\$6
14. Common crapemyrtle	6	Good	Southwest (2 ft)	\$1.86	\$7.76	\$113	\$6

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15. American holly	8	Good	Southeast (5 ft)	\$5.61	\$11.64	\$165	\$88
16. American holly	6	Good	Southeast (14 ft)	\$4.39	\$7.97	\$116	\$38
17. American holly	6	Good	Southeast (17 ft)	\$4.73	\$8.21	\$125	\$44
18. American holly	6	Good	Southeast (26 ft)	\$3.74	\$6.95	\$101	\$29
19. American holly	6	Good	Southeast (42 ft)	\$5.08	\$7.88	\$127	\$47
20. American holly	6	Good	Southeast (51 ft)	\$5.02	\$7.99	\$126	\$46
21. Magnolia	10	Good	Southeast (10 ft)	\$17.93	\$28.17	\$499	\$159
22. Magnolia	8	Good	Southeast (4 ft)	\$13.03	\$25.83	\$394	\$89
23. Magnolia	8	Good	Southeast (5 ft)	\$13.35	\$25.42	\$393	\$93
24. Southern red oak	35	Good	East (46 ft)	\$167.73	\$168.43	\$3,363	\$8,033
25. Southern red oak	35	Good	East (47 ft)	\$167.73	\$168.43	\$3,363	\$8,033
26. Magnolia	18	Good	Northeast (43 ft)	\$43.78	\$43.54	\$874	\$781
27. Shumard oak	22	Good	Northeast (86 ft)	\$71.91	\$139.96	\$2,074	\$984
28. Shumard oak	15	Good	Northeast (38 ft)	\$48.58	\$107.11	\$1,497	\$504
Total				\$1,094.03	\$1,833.91	\$28,830	\$24,966

DBH: "diameter at breast height" is the standard measurement of tree trunk width at 4.5 feet (1.5 meters) above the ground.

A cooperative initiative between:

