



... provide many benefits that keep us and our environment healthy. Below are the results of some of the research that has been done over the last 20 years to quantify these benefits.

- A large, healthy tree can produce enough oxygen each day for 18 people!
- Trees absorb carbon monoxide, sulfur dioxide, nitrogen dioxide, and polluting particulates; deciduous trees remove up to 9% of particulates and evergreens remove up to 13% of particulates from the air.
- A tree's leaves, branches and trunk intercept 7% to 22% of rainfall and release it slowly, substantially reducing stormwater runoff and non-point source pollution.
- Trees can reduce sediment movement by 95% and in a medium-sized city the amount of soil saved annually can be as much as 10,886 tons.
- Trees add value to retail areas. Businesses well landscaped with trees attract more customers and extend their customers' shopping times and spending amounts by as much as 10 percent.
- 20 minutes in a park setting is sufficient to increase the attention performance of children with attention deficits compared to the same amount of time in other settings.
- Trees increase the ability of a community to attract and retain high quality businesses and industries.
- Tree buffers are essential in maintaining a healthy and aesthetically attractive community, particularly along gateway corridors which define a traveler's vital first impressions of a town.

- Trees add 4% to 27% in property value to a single family residence, and a single tree can add up to 9% to the value of a residential property. A hardwood tree on site adds \$333 to the property, and a pine adds \$257.
- Trees, if properly placed for optimal shading of air conditioners and buildings, can provide a 17% decrease in summer cooling costs.
- Trees are necessary for wildlife. Many birds, mammals, reptiles, amphibians, insects and microorganisms depend upon trees and the forest for food and shelter, and animals eat tree fruit, buds, leaves and bark. They nest in cavities and branches and use trees for cover and shelter.



## Jefferson...

...has more than 2,400 publicly-owned trees growing along street rights-of-way, in parks, on school campuses, around city offices and facilities and in the historic cemeteries. A recent inventory and analysis of these trees using software developed by the USDA Forest Service shows that:

- City street trees provide 7 acres of canopy cover over roads and sidewalks.
- Crapemyrtles, red maples, loblolly pines and water oaks are the most abundant public trees in Jefferson, representing almost 52% of all city-owned trees.
- Jefferson's street trees provide net annual benefits that average \$27.28 per tree.
- Overall, the city's 1,081 street trees provide \$29,600 in annual benefits.
- Silver maples, water oaks, pecans, and winged elms, along with sweetgums, tulip poplars and loblolly pines provide the greatest benefits on a per tree basis.
- City street trees annually provide \$4,244 in energy benefits, \$9,639 in stormwater benefits, \$1,300 in atmospheric and stored CO<sub>2</sub> benefits, and \$14,458 in aesthetic and other benefits.
- Jefferson's street trees alone have a total replacement value of over \$1,500,000!



A recent study conducted by the City of Jefferson and the Jefferson Heritage Tree Council found that almost 56% of the area within the city limits of Jefferson is covered by tree canopy. The majority of this canopy is privately owned and found in yards, on wooded lots and farms, around businesses and industries, and at schools and facilities located within the city limits.

To keep all of our community trees healthy and providing free public services and other valuable benefits, please read, sign and enact the *Citizen's Pledge for Healthy Trees* found on the back of this brochure.