



# JUST BREATHE

## Health Benefits of Trees



### Trees help clean our air

Global forests have been instrumental in combating climate change, removing about one-third of fossil fuel emissions annually. Trees also play a critical role in improving air quality and public health by filtering pollution from the atmosphere. Additionally, roadside trees can significantly enhance indoor air quality, reducing nearby pollution levels by more than 50%.

### Trees provide us with oxygen

A single large tree can supply a day's worth of oxygen for up to four people, while the Amazon Rainforest alone produces more than 20% of the world's oxygen, highlighting the vital role forests play in sustaining life on Earth.

### Trees help clean our drinking water

Forested watersheds are crucial for providing quality drinking water to over 180 million Americans. In 1997, New York City invested \$1.5 billion to preserve its forested watershed by acquiring thousands of acres upstate, avoiding the need for a \$6 billion filtration plant. As a result, New Yorkers now enjoy some of the cleanest drinking water in the world, with the city winning regional water taste competitions.

### Trees contribute to our health

A study across 10 cities found that community forests save an average of one life each year, with New York City trees alone saving eight lives annually. Additionally, office workers with a view of trees experience significantly less stress and greater job satisfaction.



### Trees provide much-needed cooling

Trees significantly reduce surface and air temperatures by providing shade, with shaded surfaces being 20–45°F cooler than unshaded ones. In cities, trees can lower temperatures by up to 10°F by shading homes and streets and releasing water vapor through their leaves, which further enhances their cooling effect through evaporation.

### Trees help reduce the effects of climate change

Trees play a vital role in combating climate change by absorbing carbon dioxide (CO<sub>2</sub>) and storing the carbon while releasing oxygen back into the air. In one year, an acre of mature trees can absorb as much CO<sub>2</sub> as a car produces when driven 26,000 miles. A single mature tree alone can absorb over 48 pounds of CO<sub>2</sub> annually, offsetting nearly 20 pounds of CO<sub>2</sub> generated by burning one gallon of non-ethanol gasoline.

# SHOW ME THE MONEY

## Economic Benefits of Trees



### Trees help us save energy

Properly placed trees around buildings can significantly reduce energy consumption, cutting air conditioning needs by 30% and saving 20–50% on heating costs. In Cincinnati, community trees save the average household \$56 annually in cooling costs, totaling \$4.8 million in savings across the city. The U.S. Department of Energy estimates that positioning just three trees strategically can reduce a household's energy bills by \$100 to \$250 per year, lowering overall energy use by up to 25%.

### Trees increase our property values

In Portland, Oregon, homes with street trees sold for an average of \$7,130 more and 1.7 days faster than those without, with nearby homes within 100 feet of street trees also selling for about \$1,688 more. The presence of street trees had a sale premium equivalent to adding 129 square feet of finished space. Similarly, in Fulton County, Georgia, mature trees significantly boosted home sale prices, with homes in tree-filled neighborhoods selling for nearly \$105,000 more.

### Trees are a good investment of our public dollars

Investing in community trees yields substantial returns, with benefits ranging from cleaner air and lower energy costs to improved water quality, stormwater control, and increased property values. Each dollar spent on tree planting and care can generate two to five times that investment. In Indianapolis, every dollar invested in community trees returns \$5.55 in benefits, while in New York City, the return is \$5.60 per dollar. In Beverly Hills, mature street trees are valued at \$450 million, and in Berkeley, individual trees like camphor and shamel ash provide annual net benefits of nearly \$12,500 and \$9,600, respectively.

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