

# ANNUAL BENEFITS OF TROPICAL URBAN TREES

When added together, the impact of trees on the overall economy and society is tremendous. Investing in trees is a low-cost alternative to mitigating many problems through other means. In fact, many of these benefits are impossible to achieve otherwise.

## Trees Benefit Society

- ☞ Reduce stress and improve overall well-being.
- ☞ Improve learning & concentration in schools (particularly attention deficit & self discipline).
- ☞ Lead to Reduced Crime.
- ☞ Lead to improved health & faster hospital recovery.

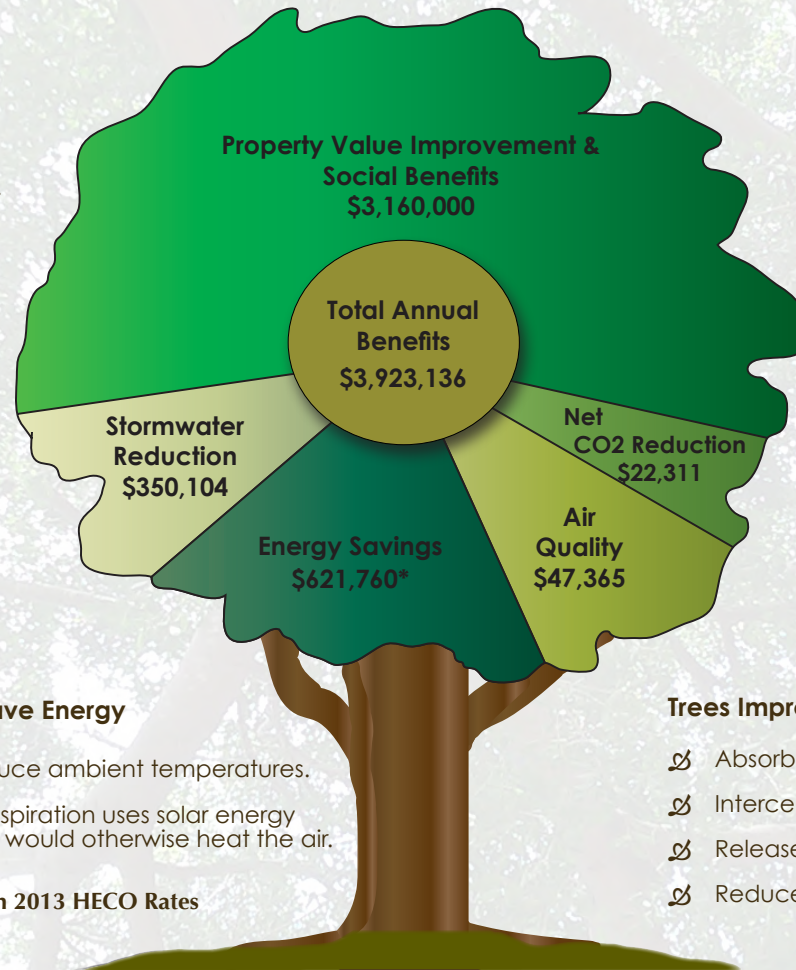
## Trees Improve Watersheds and Protect Coral Reefs

- ☞ Intercept rainfall and slow down runoff.
- ☞ Increase the infiltration capacity of soil.
- ☞ Improve water quality and coral reef health by removing pollutants and reducing soil erosion, which causes harmful sedimentation.

## Trees Save Energy

- ☞ Reduce ambient temperatures.
- ☞ Transpiration uses solar energy that would otherwise heat the air.

\*Based on 2013 HECO Rates



## Property Value Improvements

- ☞ People show a willingness to pay more (up to 6%) for trees on the property.
- ☞ People show a preference for retail locations with trees and will spend more time and money (9-12% more) while shopping there.

## Trees Make Communities More Livable

### Trees Reduce Atmospheric CO2

- ☞ Reduce the need for air conditioning.
- ☞ Sequester and store CO2 in woody biomass and leaves thereby removing it from the atmosphere.

### Trees Improve Air Quality

- ☞ Absorb gaseous pollutants (via leaves).
- ☞ Intercept particulates (dust, smoke, dirt).
- ☞ Release O<sub>2</sub> (photosynthesis)
- ☞ Reduce ozone levels (through transpiration).

Designed by Jolie Wanger, Earthwise Consulting for



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Most of the data in this publication is derived from the 2007 Hawaii Municipal Forest Resource Analysis of 43,817 inventoried street trees in Honolulu. A full list of sources can be found on our website: <http://www.smarttreespacific.org/projects/honolulu-urban-tree-canopy-assessment/benefits-of-trees/>