

THE MONEY TREE



The Benefits and Costs of Community Trees

Benefits of Trees



Trees are beautiful and add beauty to their surroundings. They add color, provide shade and privacy, and an environment for animals and people alike.

But there are more benefits that are not so obvious!



Air and Water Quality



Reduce storm water runoff/improve water quality— during rainstorms, trees slow the downpour with their leaves and twigs, allowing the water to slowly seep into the ground.

Improve Air Quality – Trees act as air filters by absorbing atmospheric pollutants and gases such as ozone, CO, CO₂ and sulfur dioxide through their leaves. Trees also reduce particulates emitted by vehicles, industry, etc.



Energy Conservation

Tempering Climate & Conserving energy

- Trees reduce the heat island effect in cities
- Trees strategically placed around a house can reduce air conditioning costs as much as 30 percent.
- Trees can conserve winter energy needs by blocking winds.
- Also critical in maintaining temperature for aquatic life in rivers, streams and lakes.



Economic Benefits



Small areas in the streetscape.

Improving the Economy

Shaded neighborhoods, shopping malls and boulevards are not only attractive aesthetically, but psychologically as well. Shoppers tend to stay longer in malls where there are trees. New research shows pavement replacement cycles increase on shaded streets.



Streetscape tree pruned for high, open canopy.

Ways to Avoid Sign Conflicts



Combined signage below tree canopy.

Health and Society

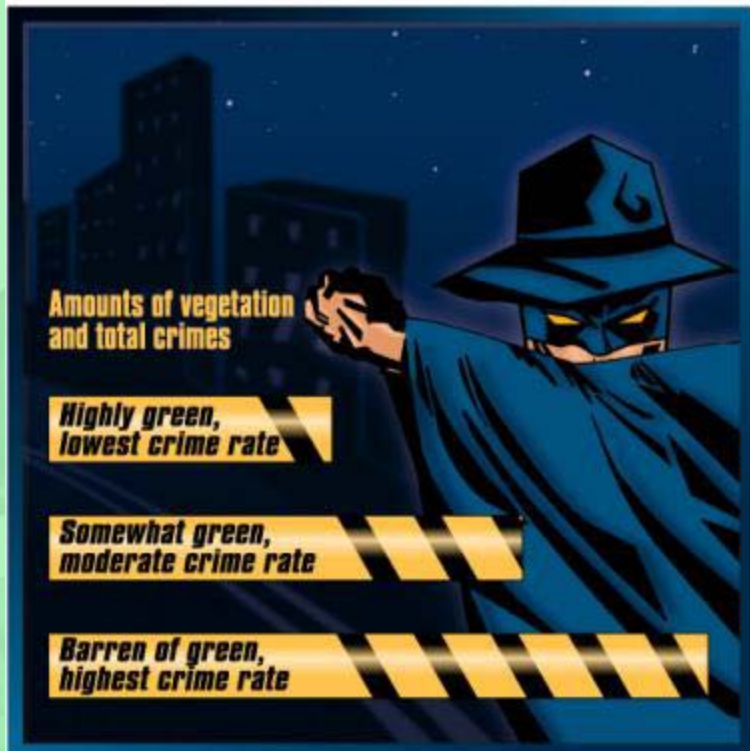
Stress reduction

Green environments reduce stress, making people productive at work and happier at home.



Green Streets, Not Mean Streets

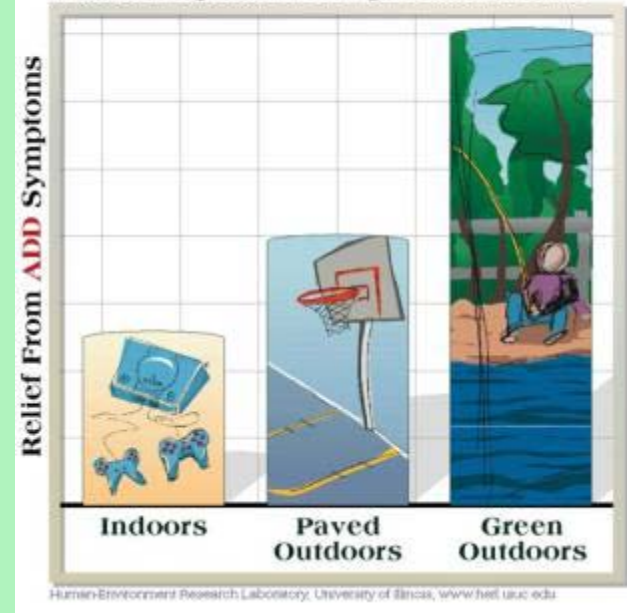
In an inner city neighborhood, the greener the residence, the lower the crime rate.



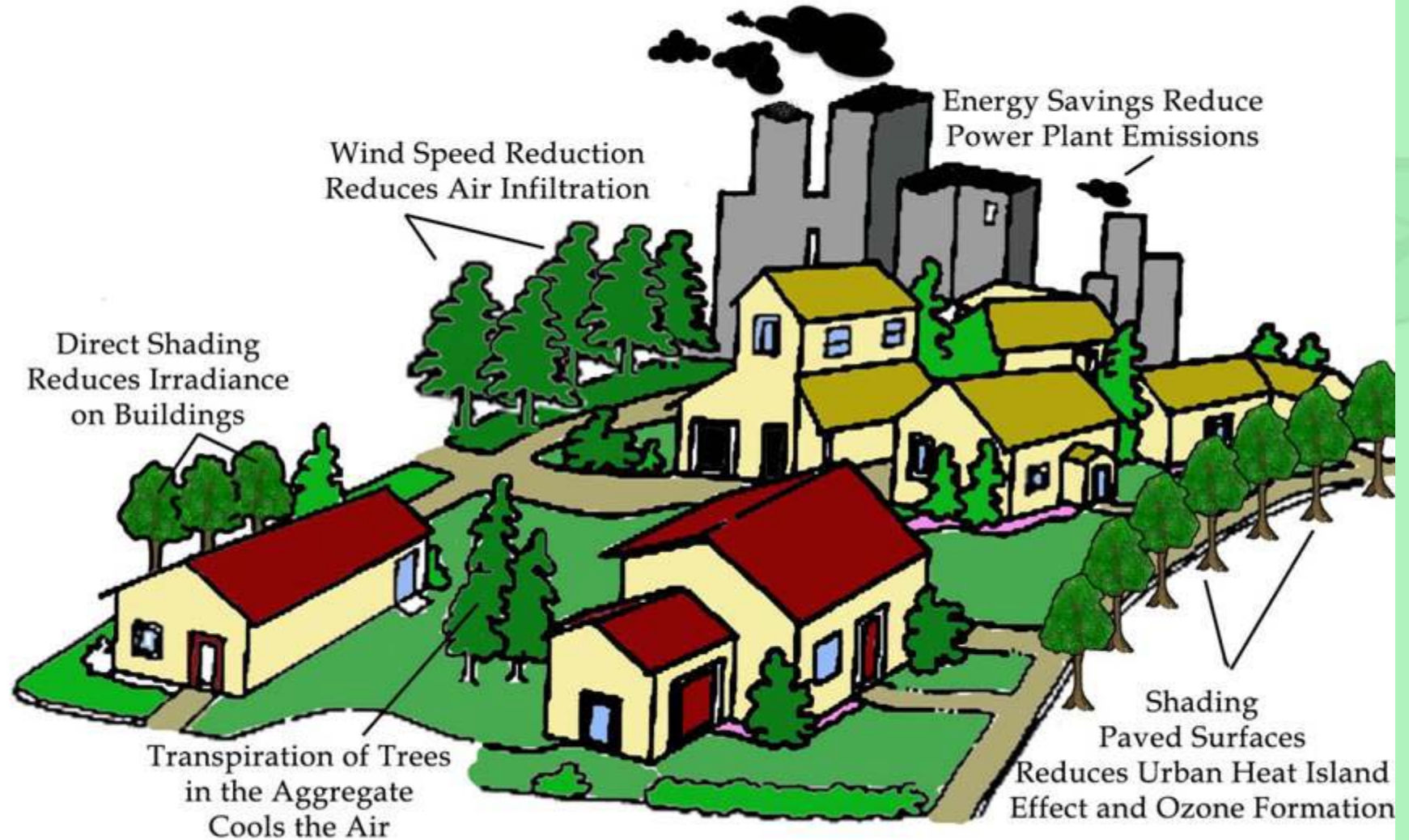
Human-Environment Research Laboratory, University of Illinois, www.herl.uiuc.edu

ADD Kids: "Go Out and Play!"

ADD symptoms in children are relieved after spending time in nature. The greener the setting, the more the relief.



Benefits of the Urban Forest



Costs of Trees

Tree Planting– Tree species and size selection to match site conditions is key to keeping costs down.



Tree Maintenance- Maintenance costs include mulching, watering (irrigation system), treating for pests, removals, and includes pruning, **HOWEVER**....structurally pruning a young tree and a regular pruning cycle can reduce future maintenance costs substantially!



Costs of Trees

Infrastructure Damage

Trees can damage utilities, sidewalks, curbs and sewer or water pipes. Choosing a good site to plant the tree or using new site preparation methods can often reduce this cost over time.



Storm Damage

Can cause irreparable damage to trees, breaking branches and damaging the tree or the area around that tree. Routine maintenance can often reduce this danger.



Comparing Costs and Benefits of Trees

Placing a monetary value on tree benefits is important to compare them to tree costs to come up with a “return on investment”

- Boulder, CO - \$3.64
- Bismarck, ND - \$3.09
- Glendale, AZ - \$2.41
- Ft. Collins, CO - \$2.18
- Cheyenne, WY - \$2.09
- Berkeley, CA - \$1.37
- Portland, OR - \$3.80

Return on
Investment for
Every \$1 Spent on
Trees

To Sum It All Up.....

- We need to think of trees differently, as a part of a community's infrastructure and “must have” items
- And....if planted and cared for properly a part of the infrastructure that increases in value and benefits provided over time!

Questions?

