



STREET SMART™ TREES

Part 4

MONEY TALKS!

In the past articles on trees and us, we looked at all the benefits that come with a Green habitat - benefits to our property values, air and water, children and ourselves. It seems like a no-brainer that we should plant trees in as many places as possible, but in the real world the money for planting trees and maintaining them has to compete for limited funds with the other necessities of living in the modern world.



At a recent 'America in Bloom Kick-Off Luncheon' in Rockford, Landscape Architect Doug Hoerr spoke about how space could be found in sidewalks, center medians, walls, lampposts, rooftops and parking lots to fit trees and plants in existing cityscapes. Doug's slides of projects throughout the Midwest revealed a genius for, as he said, creating 'more green and less grey'.



Of course he was speaking to the choir. The audience of park personnel, gardeners, and plants people were very receptive, enough so that the new Mayor was compelled to publicly throw his support behind changing the standards for the city to incorporate Greening into all infrastructure improvements.



The reality though is that Greening is an afterthought when the engineers, architects, and politicians get together to slice up the municipal hog. Except in Chicago.

In Chicago, the Mayor has not only given the normal lip service to 'Beautification', he has thrown the proverbial City Clout behind it, resulting in praise from all corners of the world. But the City didn't just plant 400,000 trees because they are pretty, the City is planting every corner and rooftop because they've got Street Smarts. Everyone knows in Chicago – Money Talks.



What money are we talking about? The money that comes from increased sales and property tax revenues and fees. The money that is saved on stormwater controls, energy usage, pollution cleanup, and avoidance of penalties. The federal and state tax dollars that can be recovered in grants and loans. The money that is donated or paid for advertising by the private sector to support Greening projects. Chicago even used federal 'welfare to work' funds to train local residents to obtain jobs in the Green Industry.

In addition, money spent on Greening usually stays in the community and is circulated locally adding a multiplier effect to the original outlay.



**McHenry County
Nursery, Inc.**

Calculating the exact amount of money that a city or county can get in both the short term and the long term is a daunting task. Luckily for anyone with a computer and a little training there are some very sophisticated GIS based programs to calculate the dollar benefits for any specific site conditions. One program, created by American Forests called CITYgreen, takes advantage of the natural ecosystems to produce the maximum economic benefits for your city. (see *CITYgreen inset*)



Foresters and arborists, landuse planners, engineers and landscape architects can use these new GIS mapping programs to estimate the cost of tree losses from development and the benefits from increase planting, preservation and maintenance. Strategic planting of Green canopies can help maximize the benefits and minimize the costs. Utilizing the existing ecosystem services in a city allows Greening improvements to be cost effectively brought to the neediest areas of the city.

Cities across the U.S., from Roanoke, VA to Salem, OR, have used dollar Greening benefits based on specific site conditions to set Canopy Cover goals, cool parking lot heat islands, tackle air pollution and manage stormwater runoff. In Washington DC satellite mapping photos showed that the city had lost 64% of its Tree Canopy over a twelve year period. The photos caught the attention of a Charitable Foundation, which donated \$50 million to improve and revitalize the city's trees. Houston, TX calculated the loss of Tree Canopy was costing them \$38 million annually in air pollution removal services and \$237 million in stormwater management services. (www.americanforests.org)

These are not insignificant amounts of money. The negative impact of Tree Canopy loss in many cities starts slowly and finishes quickly. The exponential nature of the collapse of the Urban Forest can throw a city into a spiral of decline that may take decades to undo and billions of dollars to repair. Cities today have to put the health and expansion of their Tree Canopies into their long term plans and land use ordinances with mandatory enforcement requirements. Organizing the community around tree preservation and planting is an excellent way to build community pride and attract like minded visitors and residents, which greatly improves a cities bottom line. But it is more than beautification we are talking about. We are talking big bucks in savings and revenue, and we all know 'Money Talks!'

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American Forests CITYgreen GIS software analysis of the dollar value benefit of Urban Ecosystem Services.

CITYgreen is a powerful GIS computer application for land-use planning and policy-making. The program analyzes Stormwater runoff, Air Quality, Summer Energy Savings, Carbon Storage and Avoidance and Tree Growth.

CITYgreen creates Broad regional studies or detailed small site assessments, Ecological maps showing resource values, Models for future growth, Colorful presentations, and Automatic reports and summaries.

Using CITYgreen Planners can model landscape ordinances. Engineers can estimate the impact of tree loss and stormwater management costs. Urban foresters can justify increases in maintenance, planting, and preservation. Educators can teach forestry, environmental studies, and landscape architecture. Citizen Groups can advocate environmentally friendly solutions. And Developers can save money on erosion control and stormwater management.

American Forests provides training for CITYgreen and Urban Ecosystem Analysis techniques. Workshops train students in the software and introduce ArcView for Windows GIS. No prior experience is necessary. For more information of CITYgreen training call American Forests, at (202) 737-1944

