

Partnership Collaboration and Technology Transfer

What is a Tree Worth? Find out with the Tree Benefits Calculator

The Challenge

Community trees provide more than beauty and welcome shade on a hot summer day. Trees offer tangible benefits such as stormwater management and lower energy costs. Yet calculating the present and future values of specific trees is complex. When people are unaware that initial and ongoing investments in community trees are more than offset by the trees' environmental and economic contributions, they may shortchange tree programs.

The Solution

A "tree benefits calculator" allows property owners and communities to see how investing in trees pays off in dollars and cents over time. While existing calculators provide valuable information about individual trees, the Maryland Department of Natural Resources Forest Service and the U.S. Forest Service, Northeastern Area State and Private Forestry, wanted users to see the *collective* effect of multiple trees on energy, property values, stormwater management, and other factors. So they developed an expanded tool based on a pre-existing Casey Trees calculator and i-Tree STRATUM street tree assessment data.

Now part of the State's *Smart, Green & Growing Initiative*, Maryland citizens can calculate the value of their trees and then register them on the State's *Marylanders Plant Trees* Web site: www.trees.maryland.gov/. Users enter basic, local information and receive custom results. The site also shows how the benefits from trees grow as the trees grow. Users can save their data for future analysis and planning.

Resulting Benefits

A greater understanding of the value of trees is likely to generate more public support for tree planting and maintenance programs in communities. The new tree calculator is enhancing Maryland's tree program by helping the State to:



Governor O'Malley and Attorney General Doug Gansler plant a tree with Tyler Heights Elementary School students to celebrate Arbor Day. The Governor then registered the trees on the Marylanders Plant Trees Web site and calculated the value of the services they provide.

- Reach its goal of planting one million trees by the year 2011 and encourage citizens to contribute to the planting of 50,000 trees in urban and community centers by 2010.
- Enhance its Web site, where citizens can find advice on tree selection and planting, get discount coupons for trees, and place their trees on an interactive map. Over 3,000 trees were registered on the site in its first month.
- Continue to assist 50 communities that have already set urban tree canopy goals, and engage 74 new communities in establishing urban tree canopy goals by the year 2020.
- Collect data on tree values for spatial and temporal analysis.

Sharing Success

- Davey Trees is incorporating the multiple tree function into a national tree benefits calculator and Web service.
- The multiple tree calculator and tree registry is a model for other States that set urban tree canopy goals.
- A teacher's use of social networking media generated so much interest that the Maryland Department of Natural Resources is considering using social networking media for outreach and promotion of natural resource events.

What to some may be the seemingly small action of planting a tree actually has substantial impact on our ecosystem.
Maryland Governor Martin O'Malley



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