

A Time for Wise Investments

Dr. James R. Fazio, Editor • \$3.00



The planting and care of community trees represents wise investments in what is perhaps the only part of a city's infrastructure that actually increases in value and contribution over time.

O ur nation has been suffering one of the worst recessions since the Great Depression. It is a time of tightening belts in most communities. However, with an eye to the future it is also a time for wise investing. Trees are a community asset worth protecting and expanding for the many reasons explained in this issue. Funds spent now on planting and care will pay large dividends later.

There is a Chinese proverb that offers better advice today than ever before. It goes like this: *The best time to plant a tree was 20 years ago. The next best time is now.* J. Sterling Morton, the founder of Arbor Day, probably had this in mind when he said, "Other holidays repose upon the past. Arbor Day proposes for the future." Planting, caring for and protecting existing trees are not only acts of kindness for future generations, they make good economic sense in times of shrinking budgets and rising costs.

We can thank selfless, visionary city officials from years gone by for the benefits we enjoy today from the shady canopy of trees in our communities. For example, when Americans were fighting the Civil War, leaders in New York City continued to invest in the development of a strong, centrally located city park. They planted trees and provided the huge green space we know as Central Park. It includes 26,000 trees and is visited by more than 25 million people each year, adding tremendous environmental, economic and social value to the city.

Similarly, during the Great Depression, the Civilian Conservation Corps planted millions of trees on public land that continue to protect water supplies, clean the air, provide wildlife habitat and benefit us today in so many other ways.

Across the nation, decisions are being made on how best to spend limited dollars. Urban foresters, tree boards and other Friends of Tree City USA understand the economic contributions of trees as green infrastructure. One of the challenges today is to effectively communicate this information to city officials and other decision makers.



Tree City USA® Communities Look to the Future



uper salesman and author Joseph Sugarman once said, "The greatest success stories were created by people who recognized a problem and turned it into an opportunity." Trees provide opportunity and a silent solution to many of the environmental and social problems facing our communities today. Trees are a 'good news' story even - or perhaps especially - in a challenging economy.

Irmo, South Carolina

Irmo, South Carolina is a small community that looks forward to a big future. For 120 years it was known mostly as a railroad town and "an eyesore with mostly gravel and dirt." About ten years ago, residents decided to do something about the almost treeless condition of their town and they began planting. By 2007 Irmo was named by Money magazine as the "12th Most Affordable Place to Live in the Country." Now the citizens and leaders in the community are striving to be one of the most beautiful and livable places as well.

Irmo achieved a Tree City USA award for the first time in 2008. "Trees are helping with beautification, bringing newcomers into town, and making it more of a friendly community," says Whitt Cline, the city's public service foreman. Last year alone, 220 new trees were planted. Crepe myrtles line the railroad tracks and a beautiful city park has become a special place for residents and visitors. The practical side of trees is not lost on the city fathers and mothers. In seeking to become a Tree City USA, they stated in the application: "Economic benefits for Irmo are that once these trees are established



The beautification of Irmo, South Carolina, has helped to change it from an almost treeless community of 500 to a thriving city of 12,000.

they will cut down on dust, provide more shade to lower cooling costs, reduce storm water runoff, and save electricity." Despite the economic downturn being experienced by all communities, an enthusiastic Arbor Day Committee raised over \$40,000 for tree planting last year. One popular activity is a golf tournament fundraiser that has brought in \$100,000 in the past five years. In fact, "the committee is raising more money than we can get trees planted," mused Whitt Cline. A happy situation to be in!



Artist's rendition of Bellevue's new Mercer Slough Environmental Education Center. The center serves some 12,000 students annually and will soon add another classroom building and a wet lab.

Bellevue, Washington

Bellevue's Tree City USA and Growth Award applications ran to almost 60 pages. These reflect not only an incredible amount of urban forestry activity, but a positive, supportive attitude of the mayor and city council. Despite budget cuts, Natural Resource Manager Dan Dewald reports a net increase of five percent to support his department's many projects. These included a study of 700 acres of park land and open space to assess condition. Viewed as an investment for the future, the study will enable prioritization of work to improve tree health and increase the eco-service benefits from these areas. Similarly, a 10-year update of the city's Urban Ecological Analysis using Landsat and high resolution imagery quantified a loss of tree cover citywide. The data will help with future public information campaigns and political action on behalf of trees. Other projects included riparian habitat restoration, creation of a money-saving NeighborWoods program that formed tree planting and care partnerships with residents, and completion of a fabulous \$11 million LEED-certified environmental education center.



Trees are an integral part of the Highlands Ranch planned community.

Highlands Ranch, Colorado

Since the Wild West days of the 1800's, the high plains of Colorado have held an important place in American history. Today, some of that ranch land near Denver is growing homes and businesses. One of these places is Highlands Ranch, a 22,000-acre master-planned community south of Denver founded in 1981.

From the beginning, the role of trees was recognized and made part of community planning. Highlands Ranch has received the Tree City USA award for 21 years and in 2008 was honored with a Tree City USA Growth Award.

"The Highlands Ranch Metro District recognizes the importance of a strong urban forestry program, and we believe it's a wise investment for our community," said Metro District General Manager Terry Nolan. "Although we are a relatively young community, from the beginning we have maintained a strong commitment to trees which we believe significantly enhance the appeal of the community by the many benefits they offer."

While some communities cut back on educational efforts in 2008, Highlands Ranch showed their commitment to urban forestry and the future by providing continuing education for staff and public education for homeowners. For example, two key employees were sent to a Backyards & Beyond Education Conference to learn more about fire-safe landscaping and to help move the city toward becoming a Firewise Community as well as a Tree City USA community. Other investments for the future included the purchase of GIS field and office equipment. According to Dennis Donovan, forestry supervisor, the purchase will not only improve the city's tree inventory, it will help track maintenance needs and create maps for contractors and field technicians. In the first year alone, Dennis said, "Maps were created for in-house treatments of striped pine scale on Scots pine and contracted control of Kermes scale on oak, as well as tree watering locations." Funds were also invested in the control of invasive Russian-olives. A major thrust was the development of educational programs for landowners to recruit help with an eradication program that will allow native plant species, bird populations, and all varieties of native wildlife to flourish.

Oak Park, Michigan

"We're doing anything and everything we can to save money and maintain our budget, but it will be tough next year." These were the sentiments of Oak Park General Foreman Gary Shermetaro and they could reflect the challenges being faced by cities throughout Michigan and the United States. Gary cited as a cost-saving example the shift from 2-inch caliper balled and burlap trees to 3/4- to 1-inch bare-root stock for planting. Costs have not only dropped by one-third, he said, but the trees are easier and cheaper to ship and handle, and survival rate is proving to be good.

Belt-tightening is being experienced everywhere, but in Oak Park, this is coupled with recognition at the highest levels that trees are an essential part of the community. "Our mayor and council have always been supportive of our program," said Gary. "One of the last things Mayor Naftaly would want to see go away is our Tree City USA status."

Oak Park is now in its 26th year as a Tree City USA. Signs with the 26 years added are proudly displayed in several locations throughout this small city, including at both entrances to Shepherd Park. This popular park is adjacent to city hall and the center of many activities that are popular with the residents of the community. With solid support and the results of a recent inventory and management plan by Davey Resource Group, Oak Park's urban forestry program is well positioned for the future.



Photos courtesy of Oak Park

Arbor Day is a strong tradition in Oak Park and helps to underscore the importance of trees and tree care. Here a science class from Oak Park High School admires a new white oak they helped to plant and mulch next to the public library.

Shepherd Park is the site of many tree-related activities, including an annual bird walk conducted by local bird authority Doris Applebaum (second from right). Another popular event is an annual flower show sponsored cooperatively by the Beautification Commission (the city's tree board) and the Oak Park Recycling/ Conservation Commission.



Making a Case for **Trees**



principle underlying effective public relations and persuasive communication is to be on the offense, just as it is in football or politics. In the current economic environment

this principle is especially important. All who know and love trees recognize their value and appreciate that scaling back on urban forestry is false economy. The challenge is to proactively communicate this to decision-makers. This is the job of all arborists, urban foresters, tree board members and other caring citizens who know what trees contribute to the community.

All across the country, mayors and city council members are struggling with major budget decisions. Now more than

ever, community leaders will make difficult decisions about which services to cut back or eliminate altogether. Before any budget decisions are made, it is vital that these leaders know the role trees play in growing healthy communities.

The Story We Have to Share

Once upon a time trees were widely praised for their beauty and shade. Today's hard-knocks economy requires a different look at the trees that are often planted and maintained with taxpayers' dollars. While beauty and shade are still legitimate reasons to support trees and urban forestry, it currently makes more sense to look at their practical contributions. Fortunately the data and facts are there to do the job. Here are some examples to help you make your case.



The Danger of Deferred Maintenance

- A study done years ago by the consulting firm ACRT compared tree values over time as affected by various levels of investment. As a benchmark, they began with an inventoried street tree value of \$44 million. With no planting or maintenance, in five years there was a net loss in value of \$14.5 million. At the maximum level of planting and maintenance, the city's cost over five years was \$3.7 million but the net gain in value was \$22.7 million. Today, those values would be even higher than when the study was conducted.
- Neglecting street and park trees is a sure way to increase the risk of limb breakage or entire tree failure. Not only does this compromise public safety, it raises liability and exposes the city to higher legal and compensatory costs.

Energy Savings

- Tree shade not only makes sidewalks, lawns and business districts more comfortable, it can save property owners money. In the Midwest, for example, trees can save as much as 56% of annual air conditioning costs and 25% of winter heating costs.
- The cumulative energy savings provided by trees can reduce the need for expensive new power generating facilities – whether fueled by coal, gas or oil, wind, water or nuclear means.

Storm Water Retention

- USDA Forest Service research shows that trees catch huge amounts of rainwater that would otherwise rush into the city's storm water system. For example, each 100 mature trees in the Midwest catch about 539,000 gallons of rain water annually; in the wetter Piedmont Region, the figure rises to 1.2 million gallons. In turn, trees reduce the need for larger, more costly pipes and catchment basins, especially as impervious pavement increases.
- Trees not only slow the rush of storm water, they help anchor soil and prevent erosion. This adds up to cleaner water supplies.

Air Pollution Control

- Trees are called the low tech solution to high tech problems. For example, they are an important way to fight climate change. Researchers have found that in California's inland valley communities, 100 trees remove 14 tons of CO_2 each year and 235 lbs. of pollutants, including 86 lbs. of ozone and 84 lbs. of dust and other particulate matter.
- The 'heat island' effect of city structures serves as a catalyst for the creation of harmful air pollution. The cooling influence of trees can reduce this effect.

Property Values

• Healthy trees and landscaping add value to homes and businesses. This means more tax revenue and higher resale value. By contrast, no trees or trees in poor condition can lower property assessments and everyone loses.

Business and Social Factors

- Research shows that the presence of trees entice shoppers to shop more frequently, stay longer, and spend more.
- Mounting volumes of research show that trees have a positive effect on reducing costly social problems such as workplace dissatisfaction, poor school performance, crime and domestic violence, and human health issues.

Green Infrastructure Grows in Value

Sewer and water pipes crack and break, bridges rust, street lights wear out and streets develop potholes. Most city infrastructure depreciates with time. The tree resource, on the other hand, is the one part of infrastructure that *increases* in service value over the span of its life.

When planting and pruning costs are spread over a longer period, these expenses become a smaller and smaller part of the cost-benefit ratio. On the positive side of the ledger, the so-called eco-services of trees increase with time and size of the tree. Large-maturing species and trees with greater longevity improve the ratio even more. Forest Service studies have produced quantified models for various species and in all climate zones of the country. These studies also quantify the 'pay back' of planted trees after a set number of years. For example, in the Pacific Northwest, 100 trees would accrue \$84,000 in costs (if cared for) and yield \$202,000 in measurable benefits after 40 years. This is a return of \$118,000 and does not include the effects of jobs created or preserved, educational value for children, or the more traditional values of beautifying the city and bringing pleasure to its residents.

How Arbor Day Foundation Materials Can Help

Each Tree City USA community receives support materials from the Arbor Day Foundation. Road signs and the Tree City USA flag help residents gain a feeling of pride in the accomplishments of their city and this, in turn, helps develop public support that is essential for a continuous urban forestry program. Ready-to-use press releases and other publicity items help to inform residents of the annual Arbor Day celebration and the importance of trees. Public service announcements on radio and television also help take the message of tree planting and care to millions of people.

Less obvious are the tokens of appreciation provided for the mayor's office. Including the mayor and city council members in Arbor Day celebrations and publicity is always appreciated. It helps garner support for urban forestry, especially if public statements of appreciation are made as part of the Arbor Day program or other tree-related events. This is simply a basic lesson from political science 101!

What is Needed

In short, the facts are on the side of urban forestry as a wise investment. Tools are available to help deliver this message, and citizens usually have a strong emotional tie to trees. Putting this together to maintain reasonable budgets is now an essential part of the challenge for arborists, urban foresters and all who work with or enjoy trees and want them to be a part of our future.

'Sterling Community' Honor Role

Twenty-five more communities of all sizes became eligible this year for Sterling Community status among the nation's Tree City USA award winners. This distinction is in recognition of communities that have achieved the Tree City USA Growth Award for ten years. In addition to benefiting from the accomplishments in urban forestry that the award represents, these cities have earned the right to add 'Sterling Community' to their Tree City USA road signs, flags and publicity materials.

Bath, Maine

Cheltenham, Pennsylvania

Clifton, New Jersey

Downers Grove, Illinois

Eufaula, Alabama

Evanston, Illinois

George, Iowa

Greece, New York

Grosse Pointe Park, New Jersey

Guthrie, Oklahoma

Homewood, Illinois

Indianapolis, Indiana

Jamestown, North Dakota

Jacksonville, North Carolina

Lake Park, Florida

Montgomery, Ohio

Montgomery Township, Pennsylvania

Noblesville, Indiana

Northbrooke, Illinois

Oxford, Mississippi

Raveena, Ohio

Wethersfield, Connecticut

White Bear Lake, Minnesota

Whitpain, Pennsylvania

Worcester, Massachusetts

Triple Crown Communities Set the Highest Standard

Twelve communities across the country attained a new standard for public appreciation and concern for trees. These cities have met the requirements to be a Tree City USA. They are also served by a utility that has achieved the Tree Line USA award, and they are home to a college or university that has met the standards for the new Tree Campus USA[™] award. These communities represent a major goal of the Arbor Day Foundation – to create synergy that comes from arborists and city foresters, utilities, campuses and others working together to plant trees and improve tree care.

Ann Arbor, Michigan Ashland, Wisconsin Atlanta, Georgia Austin, Texas Davis, California Kent, Ohio Lincoln, Nebraska Macon, Georgia Omaha, Nebraska San Diego, California Tempe, Arizona Washington, D.C.

A Summary of Requirements

Here are the minimum requirements to achieve each of the three awards achieved by Triple Crown Communities. Full details and application forms, are at **arborday.org**.

Tree City USA

- A tree board or
- department. **2** A tree care ordinance.
- A community forestry program with an annual budget of at
- least \$2 per capita.An Arbor Day observance and

proclamation.

Tree Line USA

- Quality tree care (both pruning and working around roots).
- 2 Annual worker training.
- Tree planting and public education (including participation in Arbor Day).

Tree Campus USA

- A campus advisory committee.
- A campus tree care plan.
- A tree care program evidenced by dedicated annual expenditures.
- An Arbor Day observance.
- Availability of service-learning projects for students.



The key to connecting children to nature in this age of computers, cell phones and every other indoor distraction is to provide enjoyable, memory-making experiences at a young age. Nature Explore is a research-based and hands-on effort to do just that. The program fosters a child's innate sense of wonder and helps him or her discover the beauty, diversity and interconnectedness in nature. Nature Explore Classrooms are the vital components of this national initiative. The program provides comprehensive resources focused on three important elements of a highly effective classroom:

- 1. A well-designed outdoor space. On-site Design Consultations help apply research-based principles to almost any location.
- 2. Staff development. Workshops help educators, administrators, and parents learn the latest field-tested methods of connecting children with nature.
- 3. Family involvement. Resources to organize family activities at schools, organizations, or in neighborhoods help connect families with the outdoors and with each other.

Go to **natureexplore.org** for resources available to help the children in your community.

A Tree – and Outdoor Classroom – Grows in East Harlem

rees going through downtown Manhattan on a flatbed truck is enough to make even New Yorkers stare in amazement. This was the case as the Arbor Day Foundation and its partner, Dimensions Educational Research Foundation, helped create a Nature Explore[®] Classroom in a former East Harlem alley. The site is now The Home Depot Foundation Community Garden, named in honor of the project's sponsor, and it is helping to introduce children to nature in the heart of one of the nation's most urbanized areas.

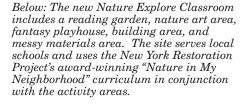
The cooperative effort in East Harlem is part of Bette Midler's New York Restoration Project, a nonprofit organization dedicated to developing and revitalizing parks and other public spaces. Bette Midler said of the partnership, "I am grateful that these wonderful people understand that the future of the country – indeed, the world – lies in the hands of our children. We owe them the very best of everything, and how fabulous it is to be able to give the students of Public School 155 a first-class introduction to nature."

Nature Explore Classrooms are the vital components of the relatively new Nature Explore program. This program is designed to address the major challenge of connecting children to nature. The Classrooms make it possible for children to safely become acquainted with the joy of constructive outdoor play that will result in the kinds of memories and associations held today by most adult Friends of Tree City USA.

Nature Explore Classrooms are designed to include at least ten "activity areas" that have been field-tested to enhance child development. These facilities are planned and supported with the help of experts and materials available through the Nature Explore program. Collaboration with a local team is



Above: Asphalt removal and soil preparation were the first steps in transforming an unsightly alley into a haven of nature in the city.







A goal of Nature Explore Classrooms is to educate and inspire children through positive connections with nature.

important, too, because a goal is to customize each Classroom to meet local circumstances and preferences. There is no size limitation for a Classroom although 2,500 to 10,000 or 20,000 square feet is typical. Locations range from national wildlife refuges and national forests to domestic violence shelters or elementary schools in urban areas.

If you would like more information about Nature Explore or to set up a design consultation, go to **natureexplore.org** or send an e-mail to info@dimensionsfoundation.org.

Urban Foresters – Your Help is Needed

Few people understand the need for developing support for trees and green spaces like urban foresters and tree board members. Tomorrow's stewards are today's children and a child must be introduced to nature before he or she can be expected to be an advocate for its protection. Developing programs and facilities like a Nature Explore Classroom is not only the smart thing to do for the future of urban forestry, it is an important community service. Because of this, helping to create a new Nature Explore Classroom will be eligible for points toward a Tree City USA Growth Award.

Support Materials are Available

Tree City USA Bulletins

Topics covered in past issues of the *Tree City USA Bulletin* range from how to plant a tree or why topping should not be practiced to how to use trees for education or how to place a dollar value on trees. Whether for your personal library or to use as a handout when contacting city officials, back issues can be located at **arborday.org/bulletins**.

Need Help Delivering the Urban Forestry Message?

A helpful, ready-made PowerPoint presentation has been created by the USDA Forest Service's Center for Urban Forest Research. It is available free to the public and can be easily modified to use local facts, figures and photos. Titled *Trees in Our City*, the illustrated program uses persuasive statistics that were developed through research in reference cities throughout the nation. The result is a customized and customizable presentation for each of 19 climate zones. The programs can be downloaded from www.fs.fed.us/psw/programs/cufr/ (click on 'Trees in Our City') for use in the following areas:

California's Inland Valley California's Inland Empire Southern California Coast Pacific Northwest Northern Mountain and Prairie Southwest Desert Interior West Temperate Interior West Midwest Coastal Plain Piedmont Northeast

1

Slide programs for additional climate zones are being developed. For areas not covered above, there is a "generic" version available.

Let's Hear From You

Please send us letters and emails with photos that illustrate how Tree City USA is being put to use in your community. If you are not sure if your community is a Tree City USA, visit **arborday.org** and click on 'Programs.'



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Did You Know?

Tree City USA awards continued to grow last year and Kaena Point Satellite Tracking Station in Hawaii not only achieved the

distinction of becoming a Tree City USA for the first time, it also wins the honor of being the smallest Tree City USA community. In the 48 contiguous states, Julian, Nebraska with 73 residents is a close second.

Number of Tree City USA communities in 20083,402
Number of new Tree City USA communities134
Number of Growth Award recipients
People living in Tree City USA
communities
Smallest Tree City USA Kaena Point Satellite
Tracking Station,
Hawaii (pop. 57)
Largest Tree City USANew York City
(pop. 8 million)

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Order Tree City USA Bulletins online at **arborday.org** or send this form and mail with your payment to:

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