

# New Jersey Community Forests

## Background

Community Forestry ensures more livable communities through the planting, care, and management of trees in cities and towns. The community forest provides a wide range of ecosystem services and functions including carbon sequestration, air pollutant removal, noise buffering, stormwater mitigation, energy savings, and reduction of pavement and building deterioration. Trees also add character to neighborhoods, creating an attractive and desirable living environment.

In 2000, urban and community land area in New Jersey was about 44.2% of the total state land area and its canopy cover was about 37.7%<sup>[1]</sup>. There were approximate 152.7 million trees in New Jersey which have about \$10 million annual value by sequestering carbon and removing air pollutants<sup>[1]</sup>. By the end of 2010, 95% of the total population of New Jersey (8.3 million people) were living in urban and community areas<sup>[2]</sup>.

## Status and Trends

The Community Forestry Program encourages municipalities to apply for Green Communities Grants and Community Stewardship Incentive Program (CSIP) grants. The Green Communities Grant helps a municipality or county hire a forestry consultant to assist them in writing a Community Forestry Management Plan. Then the CSIP Grant is available for communities to implement goals and objectives directly from their management plan.

A Community Forestry Management Plan is an essential guide to successfully achieving a healthy, economically efficient, and safe community forest. A plan may lead to reduced tree hazards, decreased tree maintenance and removal costs, fewer emergency tree calls, and increased tree benefits. It also helps communities to develop a proactive, rather than reactive, approach to tree resource management and to prioritize limited financial resources to optimize goals, objectives, and results.



Community forest in Princeton, NJ. (Photo by A. McCartney, NJDEP)

In 1999, only 14 municipalities had Community Forestry Management Plans and were actively managing their community forests. In the past 15 years, more and more communities have become involved with community forestry development and management. The number of participating communities has increased rapidly (Figure 1). By the end of 2013, 275 municipalities had a management plan, which is about half of the total municipalities in the state.

Tree City USA is a national non-profit program that provides cities and towns across the United States with a framework for community forestry management. In 1976, there were only two Tree City USA certified communities in New Jersey. It should be noted that Paramus, New Jersey was the second municipality in the nation to join the Tree City USA. The number of Tree City USA communities increased gradually from 1976 to 1995 (Figure 2). That number increased more rapidly after the New Jersey Community Forestry Assistance Act was passed in 1996. By the end of 1998, the number of Tree City USA communities in New Jersey increased to 103. In general, this increasing trend continued from 1998 to 2012. In 2011, New Jersey became 4<sup>th</sup> in the nation for the number of municipalities active in the program, surpassing California. In 2012, there were 172 Tree City USA communities in

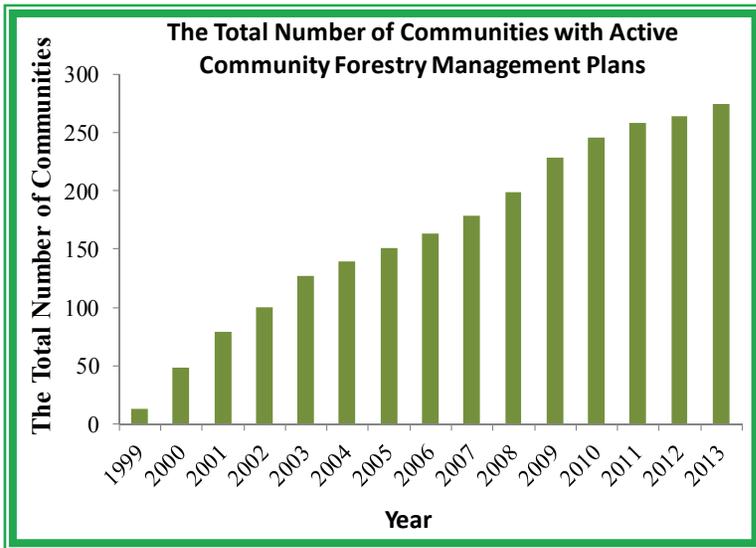


Figure 1. Cumulative number of New Jersey municipalities and counties with active Community Forestry Management Plans from 1999 to 2013.

New Jersey. According to an Arbor Day Foundation report, New Jersey Tree City USA members planted 115,726 trees in 2012<sup>[3]</sup>.

Program budgets of Tree City USA communities have increased significantly from 1976 to 2012 in New Jersey. From 1976 to 1985, the average annual budget was \$2.92 per capita. This number doubled between 1986 and 1995 (\$5.24 per capita). Community forestry budgets increased rapidly after the New Jersey Shade Tree and Community Forestry Assistance Act passed in 1996. From 1996 to 2005, the average annual budget in the state was \$8.69 per capita.

Recent natural disasters in the state have resulted in average budgets increasing to \$14.33 per capita (2006-2011). The spike in 2010 was in response to a damaging ice storm. In 2012, the average annual budget was \$44.85 per capita which is more than 20 times of the budget requirement to become a Tree City USA community (Figure 3). This increase was an effect of Superstorm Sandy, the deadliest and most destructive hurricane of that

season and the second-costliest hurricane in United States history, which caused massive vegetation loss and debris cleanup.

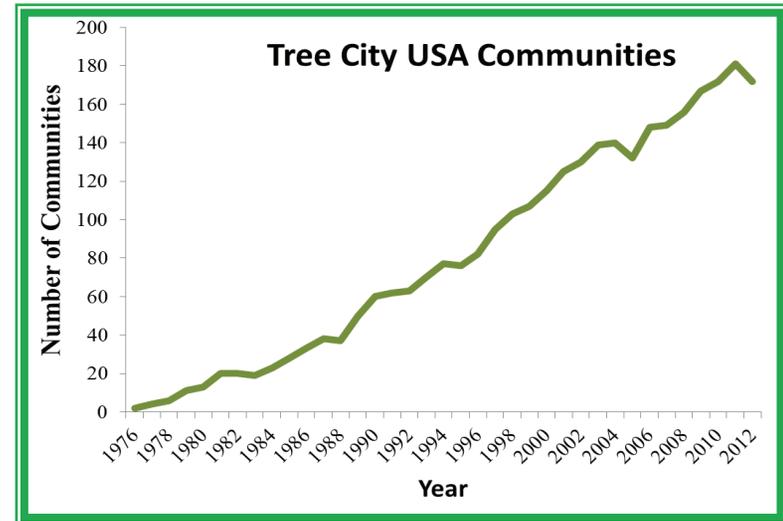


Figure 2. The number of Tree City USA Communities in New Jersey from 1976 to 2012 (Arbor Day Foundation).<sup>[4]</sup>

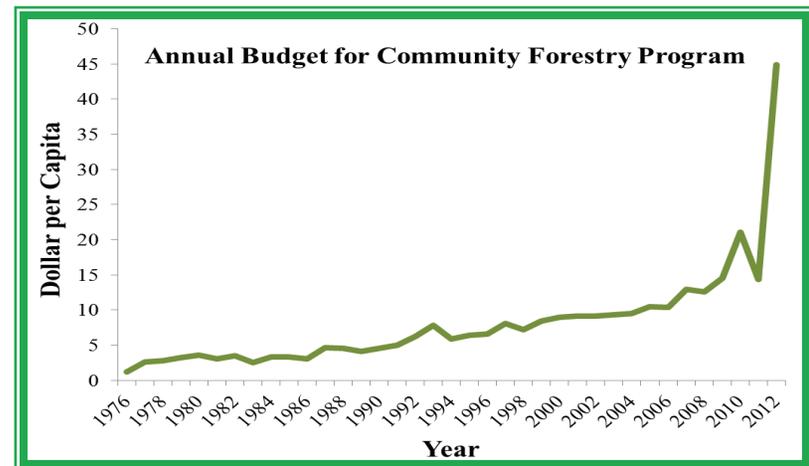


Figure 3. The average annual budget (dollar per capita) for community forestry programs of Tree City USA Communities in New Jersey from 1976 to 2012 (Arbor Day Foundation)<sup>[4]</sup>

Community forestry plays an important role on New Jersey's economy. Researchers at Rutgers University reported the total economic impact of urban forestry in New Jersey in 2012 was \$1 billion. This includes contributions from tree care and related landscaping services, sales of trees and related products, roadside and right-of-way vegetation management, and community programs and volunteering. As a result, urban forestry could generate a total of 17,408 jobs in New Jersey<sup>[5]</sup>.

### ***Outlook and Implications***

By 2050, New Jersey is projected to have 63.6% urban land<sup>[6]</sup>. Rapid urbanization and sprawl are associated with many environmental problems, including increased atmospheric carbon dioxide concentrations, water quality degradation, and limited green spaces. Community forestry is a green investment that has an important role to play in dealing with these issues.

Trees can sequester carbon and reduce atmospheric carbon dioxide concentrations, mitigate stormwater runoff decrease flooding, and provide better quality of life, improving human wellbeing. These benefits and many others are best realized when trees have grown to their full potential, live long lives, and can eventually be replaced by younger trees. Community forestry provides towns, cities, and counties with the management tools needed to help maintain healthy trees and plan for their replacement, sustaining their benefits for the long term.

The New Jersey Community Forestry Program's short-term goal is to have 200 Tree City USA communities, becoming 2<sup>nd</sup> in the nation over the next two years. For the next five years, we strive to have 400 municipalities and counties in New Jersey Community Forestry Management Plans to actively care for their tree resources. Achieving these goals will help to develop sustainable and resilient community forests to provide a healthy and enjoyable environment for all of New Jersey's residents.

### ***More Information***

For more information, please visit **New Jersey Community Forestry** at: <http://www.communityforestry.nj.gov>

Other resources:

Arbor Day Foundation: <http://www.arborday.org>

Treasure Our Trees: <http://www.treasureourtrees.org>

Grant Opportunities: <http://www.nj.gov/dep/parksandforests/forest/community/grants.html>

Management Plan Brochure:

[http://www.nj.gov/dep/parksandforests/forest/community/pdf\\_files/cf\\_act\\_benefits.pdf](http://www.nj.gov/dep/parksandforests/forest/community/pdf_files/cf_act_benefits.pdf)

New Jersey Shade Tree and Community Forestry Assistance Act Guideline: [http://www.nj.gov/dep/parksandforests/forest/community/pdf\\_files/community\\_forestry\\_management\\_plan\\_guidelines.pdf](http://www.nj.gov/dep/parksandforests/forest/community/pdf_files/community_forestry_management_plan_guidelines.pdf)

### ***References***

<sup>1</sup> Nowak, David J.; Greenfield, Eric J. 2009. Urban and community forests of the Mid-Atlantic region: New Jersey, New York, Pennsylvania. Gen. Tech. Rep. NRS-47. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. [http://www.nrs.fs.fed.us/pubs/gtr/gtr\\_nrs47.pdf](http://www.nrs.fs.fed.us/pubs/gtr/gtr_nrs47.pdf)

<sup>2</sup> U.S. Census, 2010 <https://www.census.gov/prod/cen2010/cph-2-32.pdf>

<sup>3</sup> New Jersey 2012 State Report, 2012. <http://www2.arborday.org/states/statepages/New%20Jersey.pdf>

<sup>4</sup> Arbor Day Foundation. Tree City USA, 2013. <http://www.arborday.org/>

<sup>5</sup> Economy Impact of Urban Forestry in New Jersey, 2013. [http://www.njstf.org/Economic\\_Impact\\_of\\_Urban\\_Forestry\\_in\\_NJ.pdf](http://www.njstf.org/Economic_Impact_of_Urban_Forestry_in_NJ.pdf)

<sup>6</sup> David J. Nowak, Susan M. Stein, Paula B. Randler, Eric J. Greenfield, Sara J. Comas, Mary A. Carr, and Ralph J. Alig. 2010. Sustaining America's Urban Trees and Forests. [http://www.fs.fed.us/openspace/fote/reports/nrs-62\\_sustaining\\_americas\\_urban.pdf](http://www.fs.fed.us/openspace/fote/reports/nrs-62_sustaining_americas_urban.pdf)