

# EXECUTIVE SUMMARY

## Introduction

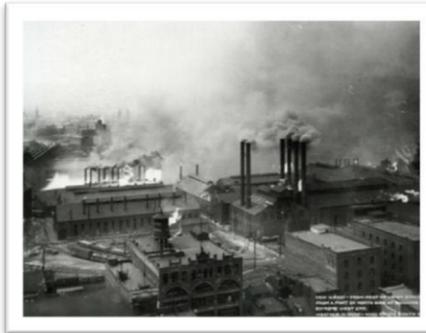
Pittsburgh is situated on a point where the Allegheny and Monongahela Rivers join to become the Ohio River. In 1753, George Washington secured a British outpost on this point and since that time Pittsburgh has been ever changing. In the beginning, Pittsburgh relied heavily upon furs and trade, but as the settlers moved in, the Native Americans were pushed out of the area. With modernization, inventions, and progress came an era of industrialism, and Pittsburgh became an important manufacturing and commercial center to the region, thriving from its oil, iron, and steel industries. The benefits of trees, including their aesthetic value, were not fully understood, and trees were cleared to make way for prosperity. It was not until well after the Industrial Revolution that the City and its residents realized the need for urban trees.

Once the steel capital of the world, the growth of Pittsburgh and its economy was fueled by heavy industry and the extensive trade of steel—to the detriment of local air and water quality and ultimately human health. After the collapse of the region's steel industry, Pittsburgh successfully adapted by shifting its industry base to health care, education, technology, and financial services, and Pittsburgh is now a thriving city once more.

Pittsburgh has been ranked as the #1 Most Livable City in the United States in several independent studies since 2007—most recently in February, 2011 by the London-based Economist Intelligence Unit; then in May, 2010 by Forbes; and by Places Rated Almanac in 2007. [8,9,10] This is an honor in which the City takes great pride. The role Pittsburgh's urban forest played in this remarkable transformation from smoke and soot covered to green is significant.

Pittsburgh's urban forest—including all trees on public and private lands within the city boundaries—softens the industrial landscape and provides a green sanctuary in an otherwise unforgiving hardscape, which greatly contributes to the City's livability. The City's street and park trees, and all trees on private lands, play a prominent role in the benefits afforded to the community by the City, and the community relies on a series of partnerships, community groups, and city departments to maintain and care for this resource.

This Urban Forest Master Plan is intended to bring the community together around a shared vision for our urban forest, creating substantial returns from this investment, and ensuring that it thrives for future generations.



*Top photo from 1906 taken from Union Station before Pittsburgh became known for green buildings. The David L. Lawrence Convention Center shown in the bottom photo is the largest LEED-certified green convention center in the United States.*

## Framework

The plan recognizes that the relationship between trees and people and places is beneficial. Trees positively affect human and public health and are valuable assets to our community, as they provide us many environmental, economic, and social benefits. The keystones, goals, and recommendations established in this plan will guide us to achieving our vision for the urban forest, and are stretched beyond the basic tenants of the *right tree right place* concept. We must work together as partners in the urban forest to consider tree choices and locations in light of the overall benefits trees provide and how these benefits can positively influence our city as a whole, while making positive changes at the neighborhood level.

The shared vision for the urban forest will be achieved through a coordinated effort of all public and private entities working in partnership to implement the recommendations of this plan. The appropriate urban forest partner will take the lead to coordinate and oversee the implementation of assigned recommendations.

The Appendix of this plan contains a list of acronyms, a glossary, references cited, tree diversity goals and recommendations, and a DVD with a compendium of existing data, plans, and reports.

## Planning Process

The plan was guided by Tree Pittsburgh, a nonprofit environmental organization dedicated to enhancing the City's vitality by restoring and protecting city trees, and by the Pittsburgh Urban Forest Master Planning Steering Committee. The framework for the process was based on understanding what we have, what we want, how we get there, and how we are doing. This process is referred to as adaptive management and is commonly used for resource planning and management. [11] This model provides a good conceptual framework for the process of improving urban forest management and it serves as the structure for how this plan has been organized.



## What Do We Have?

The urban forest framework includes all of the existing forest management resources and plans already in place and that the many urban forestry management partners share in planting, caring for, and maintaining our urban forest. The 2012 state of the urban forest section summaries data obtained from the street tree inventory and management plan (2005), the park tree inventory (2007), the municipal forest resource analysis (2008), the i-Tree ecosystem analysis (2011), and the Urban Tree Canopy Analysis (2011). [1,2,3,4,6]

### ***Pittsburgh Urban Forest Benchmark Values***

#### **Urban Tree Canopy (UTC) Cover (2011)**

UTC, all areas	40%
UTC, excluding water	42%

#### **Estimated Tree Count**

Street Trees (2005)	30,538
Park Trees (2007)	5,666
Complete Urban Forest (2011)	2,628,000
Street Trees Per Capita (2008)	0.09
Total Trees Per Capita (2011)	8.7

#### **Species Diversity: # of Species Exceeding the Recommended 10%**

Street Trees (2005)	4
Park Trees (2007)	1
Complete Urban Forest (2011)	2

#### **Pest Susceptibility (2011)**

Asian Longhorned Beetle	1,780,000 Trees (67%)
Emerald Ash Borer	230,000 Trees (9%)
Dutch Elm Disease	220,000 Trees (8%)
Gypsy Moth	175,000 Trees (7%)

#### **Street Tree Benefits (2008)**

Total Annual Benefit	\$2,400,975
Annual Per Tree Benefit	\$53
Annual Per Capita Benefit	\$8

#### **Urban Forest Benefits (2011)**

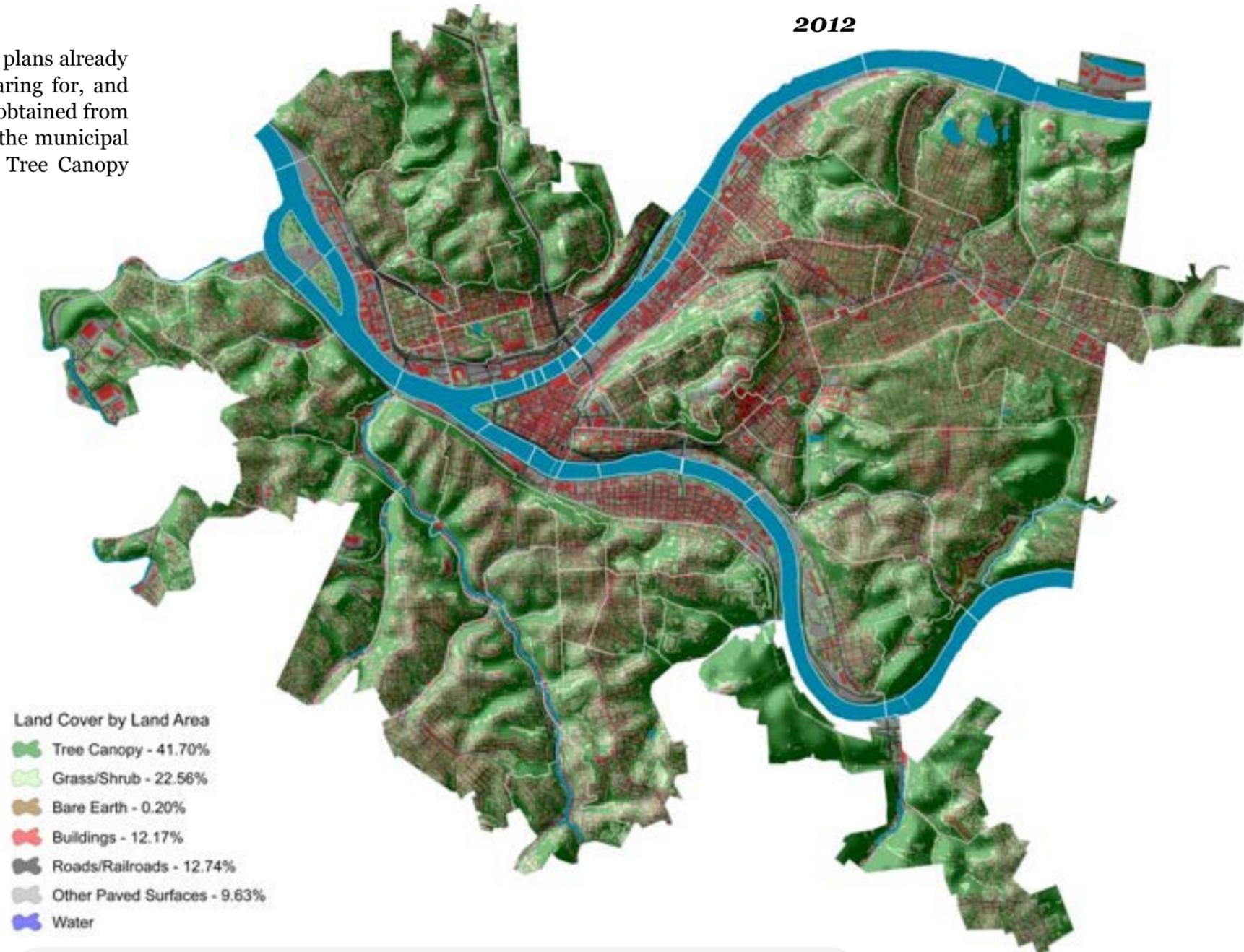
Total Annual Benefit	\$7,232,600
Annual Per Tree Benefit	\$3
Annual Per Capita Benefit	\$24

#### **Structural Value**

Street (2005)	\$37 million
Park (2007)	\$16.5 million
Complete Urban Forest (2011)	\$1.13 billion

### ***Relief Map with Pittsburgh's Land Cover***

**2012**



*Our urban forest is comprised of all trees on private and public lands within the city boundaries; these trees improve the environment and make our city a more desirable place to live, work, and play.*

## What Do We Want?

Our shared vision for the urban forest was based on the outreach campaign, Tell Us Your Tree Story. The campaign engaged urban forest partners and the public through tree volunteer meetings, partner surveys, public surveys, and community meetings.

The vision was established by synthesizing feedback from the public, the Steering Committee, and Tree Pittsburgh as to what everyone wants out of their urban forest over the next 20 years. The process revealed the community most valued trees for their ability to improve the quality of life and help define Pittsburgh's character.

## How Do We Get There?

Goals and recommendations based on the keystones of urban forestry—connect, engage, manage, plan, and protect—will guide us to achieving our 20-year vision for the urban forest. Recommendations are established by analyzing current conditions and issues related to urban forestry management across the City. The vision, keystones, and goals are presented below with recommendations considered the top priority for implementation.

**Vision** Over the next 20 years, Pittsburgh's urban forest will be a *vital and well-managed* asset that is locally valued and nationally recognized for its positive *social, environmental, economic, and public health* impacts on the community and the greater region.

Keystones	CONNECT	ENGAGE	MANAGE	PLAN	PROTECT
Goals	<ul style="list-style-type: none"> <li>Connect urban forestry partners through a single vision.</li> <li>Utilize urban forestry research in conjunction with on-the-ground operations.</li> <li>Increase access to trees so that all can enjoy and benefit.</li> </ul>	<ul style="list-style-type: none"> <li>Focus on neighborhood-based initiatives and solutions to urban forestry issues.</li> <li>Implement a coordinated and comprehensive outreach and education campaign.</li> <li>Encourage public and private participation in urban forest management through volunteerism.</li> </ul>	<ul style="list-style-type: none"> <li>Match funding to desired level of service for urban forestry management.</li> <li>Develop a proactive management regime for public trees.</li> <li>Develop a proactive risk management program for public trees.</li> <li>Ensure tree benefits for future generations through a sustainable planting program.</li> </ul>	<ul style="list-style-type: none"> <li>Incorporate urban forestry practices into the City's stormwater management plan.</li> <li>Achieve 60% urban tree canopy cover in 20 years.</li> <li>Establish a comprehensive tree emergency response and recovery plan.</li> </ul>	<ul style="list-style-type: none"> <li>Monitor the resource for exotic and invasive pests and diseases.</li> <li>Protect trees and preserve their role in defining the City's character.</li> </ul>
Priority Recommendations	<ul style="list-style-type: none"> <li>Convene a summit of all agencies with a major impact on our urban forest to formalize communication methods, identify cooperative projects, and seek synergy.</li> <li>Convey the benefits of local urban forestry research to all stakeholders.</li> <li>Give priority for urban forestry and outreach activities to disadvantaged communities that are currently gaining the least benefit from the urban forest.</li> </ul>	<ul style="list-style-type: none"> <li>Solicit feedback and input directly from neighborhood tree advocates about how to increase activism and interest in the urban forest.</li> <li>Create and sustain a comprehensive communications plan that addresses effective ways to engage all stakeholders.</li> <li>Concentrate volunteer efforts in disadvantaged neighborhoods where tree canopy is lowest.</li> </ul>	<ul style="list-style-type: none"> <li>Reassess the City's urban forestry program budget in terms of achieving street tree and UTC planting goals, the recommended seven-year preventive maintenance cycle, and the young tree maintenance programs.</li> <li>Regularly monitor public trees for maintenance needs, risks, and pests.</li> <li>Facilitate a systematic tree maintenance program for public trees.</li> <li>Choose performance-based planting strategies geared towards improving specific benefits.</li> </ul>	<ul style="list-style-type: none"> <li>Target urban tree planting and tree canopy expansion efforts based on increasing stormwater benefits.</li> <li>Develop achievable, minimum canopy cover goals for each land use type, neighborhood, and watershed.</li> <li>Create a comprehensive Tree Emergency Response and Recovery Plan.</li> </ul>	<ul style="list-style-type: none"> <li>Identify the highest level exotic pest threats and develop strategies for monitoring, control, removals, and replanting.</li> <li>Update and enforce ordinances that protect existing tree resources both on public and private lands.</li> </ul>

## How Are We Doing?

Implementation of the plan requires continual monitoring, analysis, and revision. Progress towards accomplishing recommendations and reaching the shared vision will need to be measured and shared with urban forest partners. A report card and a state of the urban forest report that measure how we are doing will be created to keep stakeholders aware of accomplishments made and efforts yet to be realized.



Pittsburgh has a long tradition of planting trees for future generations.