Frequently Asked Questions:

- **What are some of the benefits of an urban inventory?** Trees provide benefits and services regardless of where they occur (all trees sequester carbon, provide habitat, filter water, stabilize soils, provide biomass, enhance biodiversity, create jobs; some trees also increase crop yields, protect livestock, conserve energy and improve health and safety). These services can be quantified, valued and their management consequences evaluated.

- **Is this urban inventory program similar to a Street Tree Inventory?** No, it is a sample-based inventory of all trees in urban areas that provides scientifically sound, statistically reliable information for urban planning at national, metropolitan area, and city scales.

- **How are urban inventory sample plots identified and located?** Extend the FIA base sample across urban areas in each metropolitan area, then intensify the sample within the hub city boundary by selecting random sample locations to assure unbiased estimates of the character of the urban forest.

- **Who will collect the data?** FIA, partners, cooperators, and contract crews will collect data. All crews will be trained and certified by FIA and routinely checked to assure FIA quality standards are met.

- **Will the urban inventory utilize remote sensing?** Yes, for field logistics, sample stratification and population estimation, land use and cover identification, map products, etc. which can be merged seamlessly with rural forest inventory data

- **Will the urban inventory methods differ from inventory methods used in rural areas?** The urban inventory will use the same basic FIA protocols as rural data with the addition of i-Tree UFORE data so users can assess urban ecosystem services and benefits.

FAQs *(continued)*

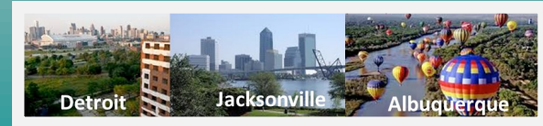
- **Will the urban plots be on public and private land?** Yes

- **How are urban and rural inventory plots linked?** They share the same FIA base sampling frame which allows generation of rural inventories, urban inventories, and seamless urban to rural gradient assessments.

- **Will there be public access to the urban inventory data?** Yes, there will be a logical expansion of FIA rural forest inventory delivery systems accessible from FIA and i-Tree sites. A datamart will be provided where users can download data, grab summary tables, access periodic reports, or run custom queries using online tools. Release of FIA urban data will follow the same FIA privacy protection protocols in place for FIA rural data.

- **How will the Forest Service analyze the data and provide key findings?** Annual statistical updates will be provided and posted online along with more comprehensive analytical reports that include UFORE results every 5 years.

Where can I obtain more information about the FIA urban inventory? Please contact one of our regional offices at the numbers provided on the last page of this brochure, or visit the website provided where the FIA Urban field guide, important links and other documents are posted.



For more information on Urban FIA

Visit the Urban FIA national web site at http://www.fs.fed.us/urban_FIA or contact one of the offices below:

Washington, DC
703–605–4177

North
St. Paul, MN
651–649–5139

South
Knoxville, TN
865–862–2000

Interior West
Ogden, UT
801–625–5407

Pacific West
Portland, OR
503–808–2034

UNITED STATES FOREST SERVICE
Caring for the Land and Serving People

July 2014

USDA **United States Department of Agriculture**

Urban Forest Inventory

monitoring the trees where people live

Forest Inventory and Analysis

84% of population lives in urban areas

FIA Mission: *Improving the understanding and management of the nation's natural resources by maintaining a comprehensive inventory of the status and trends of our diverse forest ecosystems, their use and health for over 80 years.*

Science Serving Society

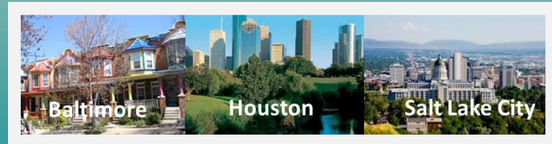
Forest Service—Research and Development

What is the Forest Inventory and Analysis (FIA) Program?

- FIA is a forest inventory program working in partnership with the nation's state forestry agencies, universities, and nongovernmental organizations (NGOs). FIA is the only comprehensive field-based and annually updated inventory of all forest ownerships for each of the 50 states and affiliated Pacific and Atlantic Islands *(since 1928).*
- FIA provides scientifically sound carbon estimates for all U.S. forests annually to the Intergovernmental Panel on Climate Change *(since 1994);* tracks the ownership objectives, management practices, and future intentions of over 10 million private forest landowners in the U.S. *(since 1953); and* monitors wood flows to all primary wood-using facilities in the U.S. *(since 1947).*
- With guidance from the 2014 Farm Bill and experience gained for past urban pilot studies, FIA will team up with i-Tree to implement an annualized inventory of trees in urban settings to monitor their status and trends, and assess their ecosystem services, values, health, and risk to pests and diseases.
- Since 1992, FIA has provided public access to current and historic inventory data through online tools, pioneering concepts recently seen in the President's 2013 Executive Order on Open Data.

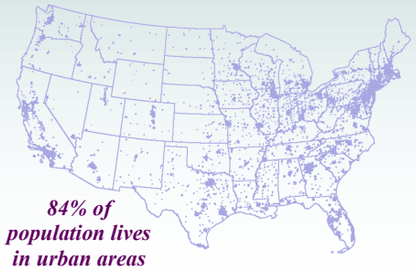
What is UFORE? The Urban Forest Effects computer model designed to calculate urban forest ecosystem services and values based on field data inputs and available data sets from external sources.

What is i-Tree? i-Tree is a state-of-the-art, peer-reviewed software suite from the USDA Forest Service that provides urban forestry analysis and benefits assessment tools. The i-Tree Tools help communities of all sizes to strengthen their urban forest management and advocacy efforts by quantifying the structure of community trees and the environmental services that trees provide. For more information go to: http://www.itreetools.org/



What is an urban forest?

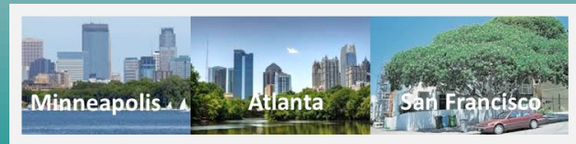
Urban forests are the trees and other vegetation growing along streets and waterways, around buildings, in backyards and parks of our cities and towns. They are critical to the function and livability of these human habitats. For the purposes of FIA sampling, urban forests are those treed areas nested within US Census CBSA's (metropolitan areas), UAUC (urban areas and clusters) and City/Places. The distribution is seen on this map.



84% of population lives in urban areas

Why monitor urban trees?

Urban trees and natural spaces are critical to human health and well-being. A neighborhood's trees moderate air and water pollution, reduce heating and cooling costs, and provide shade and shelter from the hot summer sun. Healthy trees can provide wildlife habitat and improve real estate values. Research shows that trees improve mental health, strengthen social connections, and reduce crime rates. Trees, parks, and other green spaces get people outside, helping to foster active living and neighborhood pride. We can all appreciate these benefits, and the more we know about the trees in our cities and towns the better we can nurture them and sustain their benefits. Yet, despite all their benefits and the need to know more about them, urban forests are not currently covered by a continuous wall-to-wall inventory and monitoring system like rural forests.



Urban FIA

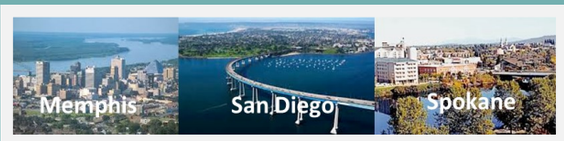
It's time to fill this information void by extending the FIA sampling frame to urban areas. The FIA plan is to begin with the metropolitan areas of two major cities, then add more city metropolitan areas as funding allows until all urban forests in the nation are covered.

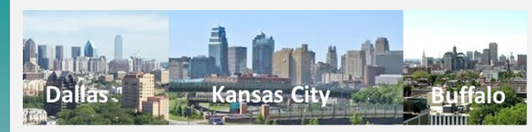
Baltimore, Maryland Project "The U.S. Forest Service staff are real pros… We look forward to the information the FIA urban inventory program will provide for Baltimore, and we'll be glad to assist in any way possible."- *Erik M. Dihle, Chief of Urban Forestry, Baltimore City Recreation and Parks*

We're very pleased with the "all lands, all people" approach demonstrated by USFS by way of the Urban FIA launch, and are excited to have the USFS FIA program helping us learn more about trees in the metropolitan Baltimore area. This will increase our ability to identify issues and solutions for people and trees in Baltimore City. *–Michael Galvin, SavATree*

Austin, Texas Project- Austin is fortunate to be at the forefront of this prestigious national project. At the municipal level, the information provided by Urban FIA will help Austin understand the full picture of its resources, including their value to the community, and will be key for implementation of the recently adopted Austin Urban Forest Plan. *-Angela Hanson, Urban Forestry Program Parks and Recreation Dept. City of* Austin

"With the increasing population within the State of Texas and the growing recognition of the environmental and economic benefits trees contribute in urban areas, the Texas A&M Forest Service faces a pressing need to provide city government, non-profit organizations and consultants accurate information about urban trees to strengthen their urban forest management and advocacy efforts." – *Burl Carraway, Texas A&M Forest Service*





What kind of data will FIA collect?

The following list demonstrates some, but not all, of what will be monitored in the urban inventory:

- *Tree species* – Determining what trees are growing in the urban environment and which tree species are most abundant.
- *Tree size* – Measuring tree size helps us learn more about the tree's ability to provide benefits as well as the future of the urban forest.
- *Tree crown condition* – Recording the size, shape, and density of all of a tree's branches and leaves tells a lot about the health of a tree, how well it's growing in its location, and its impact on plants growing underneath.
- *Tree Damage*– Assessed trees for any signs of damage, such as the presence of forest pests or disease, impact from storms or environmental stresses, or improper management and care helps identify species prone to damage to develop effective management plans.
- *Ground Cover* – Provides a description, in areas with or without trees, of the existence of other plants, permeable (gravel, bare soil) and impermeable surfaces (asphalt, cement) to learn more about water infiltration potential and runoff to improve urban planning.
- *Ownership* – Identification of public and private land provides information to tailor integrated management strategies across ownerships.
- *Re-measurement* - Repeated measurements over a period of years will tell more about how the urban forest is changing.