

THE URBAN FIA INVENTORY: PLOT DESIGN, DATA COLLECTION, DATA FLOW AND PROCESSING

Tonya Lister¹, Mark Majewsky², Mark Hatfield³, Angie Rowe⁴, Bill Dunning⁵, Chris Edgar⁶, Tom Brandeis⁷

Abstract—More than 80 percent of the U.S. population lives in urban areas and tree cover in these areas offers a wide range of environmental benefits including the provision of wildlife habitat, aesthetic appeal and visual barriers, microclimate control, water quality improvement, and air and noise pollution control. Recognizing the importance of urban forests, and with direction from the 2014 Farm Bill to include urban forest monitoring in its strategic plan, FIA has initiated an annualized urban inventory program. Urban FIA Inventory methods include a blending of elements from the core FIA program and from the i-Tree Eco program, along with several new urban field variables. Under the Urban FIA Inventory protocol, unique nonforest land uses are mapped and tree measurement data are collected across all land uses using a fixed radius, single subplot plot design. In this session, we will present an overview of FIA's urban inventory methods, including sample plot design and data collection methods. We will also discuss lessons learned based on the first field season of data collection and future improvements and additions to the Urban FIA methodology.

¹ Tonya Lister, Research Forester, NRS FIA, 610-557-4033, tlister01@fs.fed.us

² Mark Majewsky, Supervisory Forester, NRS FIA, 651-261-0053, mmajewsky@fs.fed.us

³ Mark Hatfield, Forester, NRS FIA, Durham, NH, 603-868-7641, mahatfield@fs.fed.us

⁴ Angie Rowe, Supervisory Forester, SRS FIA, 865-862-2052, krowe@fs.fed.us

⁵ Bill Dunning, Supervisory Forester, RMRS, 801-625-5463, bdunning@fs.fed.us

⁶ Chris Edgar, Forest Resource Analyst, Texas A&M Forest Service, 979-458-6630, cedgar@tfs.tamu.edu

⁷ Tom Brandeis, Supervisory Research Forester, SRS FIA, 865-862-2030, tjbrandeis@fs.fed.us