

# Bartlett Tree Experts Case Study: Georgia World Congress Center

## PROJECT SUMMARY

**Client:** Georgia World Congress Center Authority

**Location:** Atlanta, Georgia

### Client & Property Needs:

- Proactive Plan for Tree Management
- Tree Inventory and Assessment
- Plan to Identify and Reduce Tree Risk
- Tree Population Characteristics

### Return on Investment:

- Estimated \$2,916,113 Asset
- Inventory and Assessment of 1,528 Trees
- Risk Mitigation Performed on 100 Trees
- Establishment of \$160,000 Annual Tree Care Budget
- Estimated \$6,742 in Environmental Services per Year
- Estimated 211 Tons of Carbon Storage at a Value of \$28,100

## Project Narrative

The Georgia World Congress Center in Atlanta, Georgia is a convention center campus that sees more than 1 million visitors each year. The campus includes street trees, trees in medians, and trees in park-like settings, with trees ranging from newly planted to mature.

After becoming the Grounds Operations Manager for the Georgia World Congress Center, Steve Ware decided that he needed a partner to help manage and maintain the large tree population. Steve had visited the Bartlett Tree Research Laboratories in Charlotte, NC as a student at Clemson University, so he knew that Bartlett Tree Experts had the science to assist. Steve and Bartlett Commercial Arborist Representative Tom Dossett started the conversation on how to approach managing the campus. Afterwards, Steve decided to partner with Bartlett Tree Experts and have the Bartlett Inventory Solutions team conduct an initial tree inventory and assessment in several sections of the campus.

## Inventory Project & Results

In October of 2016, the Bartlett Inventory Solutions (BIS) team conducted the inventory project. The BIS team used the i-Tree Eco application developed in part by the USDA Forest Service to provide the environmental benefit estimates. The inventory project was completed for a cost of \$11,700.

The inventory was completed in November of 2016 with 1,528 trees being inventoried and assessed, and an estimated asset value of \$2,916,113. Approximately 29% of the population received risk ratings in the field with <1% being High or Moderate risk. It was determined that 90% of the population was in fair condition, and approximately 70% were less than 10 inches in diameter. The inventory also resulted in 45 tree species being identified. The estimated net annual environmental benefits were estimated to be \$6,742. Annual carbon sequestration was estimated at 18 tons/year at a value of \$2,360/year and a carbon storage amount of 211 tons, at a value of \$28,100. The tree population was also estimated to reduce storm water runoff by 23,508 cubic feet/year.

## Return on Investment

The tree risk assessment information provided Steve Ware with a starting point for tree care. Soon after the management plan was delivered, Bartlett was able to assist Steve with addressing trees that were assigned risk ratings through tree removals and structural pruning. The initial risk mitigation project total was \$21,000 for approximately 100 trees and focused on trees in close proximity to benches, mainly addressing over-extended branches and co-dominant leaders. Steve and Tom continue to work through the management plan, page by page, to proactively manage the 1,528 trees.

BIS was also able to run calculations based on the scenario, "what would the impact to the cumulative estimated asset value be if all trees in fair or poor condition were able to be improved to good condition based on their recommendations?" In that scenario, the estimated asset value would increase by approximately \$1,130,453. These calculations provided Steve Ware with the information necessary to establish a \$160,000 annual tree care budget for the campus.

***"I hired Bartlett Tree Experts initially for the GIS survey, but I continue to hire them repeatedly for projects that range from safety tree pruning to soil remediation and soil rehabilitation. Their work is based on solid science driven by their independent research. Basically, Bartlett is a trustworthy and highly competent partner for our campus."***

**- Steve Ware, Grounds Operations Manager, Georgia World Congress Center Authority**