

Public Tree Inventory 2020

University City, Missouri

Davey Resource Group completed a geographic information systems-based tree inventory of University City, Missouri in December 2020. Trees in right-of-way (ROW) were inventoried.

University City Tree Inventory

The following statistical summary of the tree population reflects species composition, condition, and benefit information:

- A total of 3,043 sites were inventoried, all trees.
- The species *Quercus palustris* (pin oak), comprises 26% of the inventoried tree population, followed by *Acer saccharum* (sugar maple) and *A. saccharinum* (silver maple) each at 5%; *Liquidambar styraciflua* (sweetgum) and *Fraxinus pennsylvanica* (green ash) each at 4%, and all other species, 56%.
- Conditions include: 1,443 trees are noted as Good (47%); 1,480 trees are noted as Fair (49%); 103 trees noted as Poor (3%); 17 trees are noted in Dead condition (1%).
- Greenhouse Gas Benefits: \$23,155; 1,116,505 lbs CO₂ avoided and 2,137,292 lbs CO₂ sequestered
- Water Benefits: \$214,490; 7,914,777 gallons saved
- Energy Benefits: \$162,221; 779,619 kWh saved and 105,101 Therms saved
- Air Quality Benefits: \$26,874; 8,057 lbs pollutants saved
- Aesthetic/Property Benefits: \$220,598; 911,875 leaf surface area (sq.ft.)



Tree such as these pin oaks can pose unnecessary risk. In order to address instances of risk and maximize the benefits trees provide, cyclical maintenance needs to occur. Tree inventories provide insight into maintenance requirements for your tree population and risk assessment information that can aid in prioritizing work.

This phase of tree inventory is another important planning tool that should help University City continue a systematic program for tree care and determine budget, staff, and equipment needs. Implementation of the maintenance recommendations will improve public safety and help guide future management decisions. When properly maintained, trees return economic, environmental, and social value to the community. These benefits greatly exceed the time and money invested in planting, pruning, protection, and removal.

Some of the environmental benefits trees provide include: shading and acting as windbreaks, which decreases residential energy consumption; slowing and reducing the amount of stormwater that reaches storm drains, rivers, and lakes; reducing noise levels; cleansing atmospheric pollutants; producing oxygen and absorbing carbon dioxide; stabilizing the soil by controlling wind and water erosion; and providing a habitat for wildlife. Additionally, the aesthetic benefits of properly-managed and well-placed trees are numerous. Attractive areas increase property values and appeal to commercial businesses. The shade and beauty trees provide enhance quality of life throughout University City.

