Comprehensive Tree Plan

Improving Our Level Of Service Patricia Biegler Public Works December 10, 2019 New City Arborist and Division Manager

► James "Mike" Byrd ▶ Bs in Forestry from Auburn ▶ 10 years with Corps of Engineers Contracting and administering timber sales Managed environmental needs at two bases ► 14 years with Georgia Power as Vegetation Clearance Arborist ►ISA certified arborist ►ISA certified utility arborist ► Have ISA tree risk assessment qualifications ► Certified pesticide applicator

DUTIES INCLUDE

City Arborist per Ordinances
 Manage City's tree inventory

- Planning
- Planting
- Maintaining
- Removal

Manage Urban Forestry Branch
 Manage Beautification Branch

Urban Forestry-Background
 21 Employees

► 3,600 Work request/year

► 200,000 Trees in on city ROW only

► 500,000 Trees in ROW in county

1.5 – 2 million trees including parks and city owned property

▶ 100,000 Trees/employee

City Ordinance:

Gives City Arborist Responsibility to:

- Protect trees on public and private property now and into the future.
- Allow tree removal only where hardship exists, <u>not</u> simply for inconvenience.
- Prepare a plan to prevent canopy loss.
- Maintain trees. Pruning most needed maintenance.

RECURRING ISSUES/COMPLAINTS

- 1. Tree Removal requests
- 2. Driveway Damage
- 3. Large Tree at South Commons
- 4. Georgia Power agreement
- 5. Canopy Loss
- 6. Tree Maintenance/Pruning

Tree Removal

1. Most controversial area

2. 1,478 calls/request last year. 49% were removed

3. Will remove tree if

- Health rating is below 50
- Inadequate growing space
- Undesirable species
- If root causing damage evaluated as a hardship

Section 4.6.18.B.2 – Extraordinary Conditions.

There are extraordinary and exceptional conditions pertaining to the property in question that would result in a particular hardship to the owner, as distinguished from a minor inconvenience, if the strict letter of these regulation were carried out.

Section 4.7.4. - Miscellaneous.

B. Damage by City Trees . When, in the opinion of the City Arborist, roots of a tree on public property damage City curbs, gutters and sidewalks including the portions of driveways on public right-of-way, **the City shall be responsible for appropriate corrective measures which are least damaging to the tree.....**

Cont. Tree Removal

4. Trees not removed because

- On private property
- Not the danger citizens think
- Tree not causing the damage alleged by the citizen

Leaning Pine Tree



Option 1: Enhance Existing Process

Continue with current criteria in ordinance

- Be as flexible as is reasonable to include other considerations besides tree health.
- Fully implement appeals process as laid out in the ordinance
- Develop program for cutting or blocking roots where appropriate
- Evaluate cost for root program and include in upcoming budget

Tree Removal Request Process:

- 1. Citizen calls 311 request removal of tree(s).
- 2. Public Works checks for safety issues making removal a priority if warranted. Also checks that the tree(s) are on city property
- 3. Trained Urban Forestry staff members will go back to evaluate each tree
- 4. Staff makes recommendation and advises citizen of decision. Will remove tree if appropriate.

Cont. Tree Removal Request Process

- 5. If removal denied citizen can appeal to City Arborist via work request through 311. City Arborist will investigate and then respond by registered letter as required by ordinance.
- 6. If removal is again denied, citizen can then appeal to Tree Board.
- 7. Lastly can appeal to City Council.

Option 2: Expanded Criteria at City Expense

- This option will require changes to the UDO as currently written
- Need to establish what criteria should be used and prepare cost estimate
 - Exposed roots?
 - Simply don't want?
- Revise UDO language
- Evaluate costs
 - Removal of 600 trees
 \$1.25 M equipment
 \$250 K per year for manpower

- If city removal is denied, resident may apply for a permit
- Ordinance already identifies permit fee of \$35
- Tree(s) must meet nuisance criteria
- Citizen would remove tree(s) at own expense
- They must also replace tree(s) on their property or pay into tree fund for replacement

Section 4.7.1. - Nuisances.

A. Public Nuisances.

1. Authority of City Arborist. The City Arborist has the authority to declare as a nuisance any tree or shrub or parts thereof growing on public or private property, and interfering or endangering the use of the public streets or sidewalks or obscuring sight distances and creating a traffic hazard on intersections or endangering the life, health, safety or property of the public.

Section 4.7.4. - Miscellaneous.

C. Required Permits.

1. Actions Affecting Public Trees. Any person or organization shall not take any of the following action to or upon any public trees as determined by the City Arborist unless previously approved in a site development permit or without first obtaining the proper permit from the City Arborist:

- (A)Cut, prune, climb with spikes, break, damage, remove, kill, or cause to be killed;
- (B) Cut, disturb or interfere in any way with any root within the drip line;

2. Permit Fees. A permit fee of \$35.00 shall be assessed for each permit and shall be applicable to the particular job as specified by the permit.

3. Permit for Removal of Trees on City Property. A request for a permit to remove trees on City property may be submitted to the City Arborist, if accompanied by a proposed landscape plan. The landscape plan must show the number, size, and species of plants and must replace all removed trees at a 1:1 ratio.

4. Tree Planting Standards. All trees proposed shall adhere to Section 4.6.15 relating to standards for tree planting.

Options

- 1. Enhanced Appeals Process:
 - Doing now
- 2. Extended Definition:
 - Ordinance change
 - Additional funding for removal crews
- 3. Residential Permit Option:
 - Council approval
 - No Ordinance change needed

City Tree Driveway Issue



DRIVEWAY DAMAGE

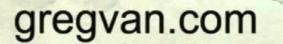
Current Practice

- Evaluate damage
- If appropriate, issue claim process letter
 - 2018 7 letters issued
 - 2019 1 letter issued
- Policy has been 50% paid by resident and 50% by City for apron only
- Ordinance specifies no more than \$2,500
- Claim processed through 311 to Risk Management

Root Damage to Concrete Driveway – Convex – Pushed Up



Foundation Issue with Concrete Driveway – Concave – Sunk down



South Commons Willow Oak

- The Willow Oak is the largest known tree in Muscogee County.
- In 2015, the tree measured out 7 feet Diameter, 97 feet tall and a spread of 105 feet.
- In 2016, straight line winds caused severe damage to 1/3 of the crown.
- We are using corrective pruning measures to help the healing of the damaged portion of the tree.
- The tree has responded well to the measures put in place.
- We plan to continue these measures to help protect this historical treasure.

Before storm and After Storm



Signage for South Commons Willow Oak

SOUTH COMMONS WILLOW OAK

This Willow Oak is the largest tree in Muscogee County It is estimated between 100 and 200 years old. Measurements taken in 2017 show it to be 97 feet tall. with a canopy spread of 105 feet, and a trunk diameter at 4.5 feet of 84 inches Straight line winds in April of 2016 severely damaged 1/4 to 1/3 of the canopy. Unofficially this may be the third largest willow Oak in Georgia.

Georgia Power

1. Georgia Power works under the Franchise Agreement and a MOU currently.

2. The Franchise Agreement gives authority to place and maintain their equipment on City right of ways.

3. The MOU sets some guidelines for pruning, removing, planting, and cycle lengths in the City of Columbus.

4. Georgia Power sends the City Arborist Office a weekly email with locations of tree crews working in the City.

5. Georgia Power sends an annual work plan detailing pruning cycles within the City.

6. Georgia Power also coordinates any tree removals on City R/W and reimburse the City for those trees.

Georgia Power Line Pruning



Canopy Studies

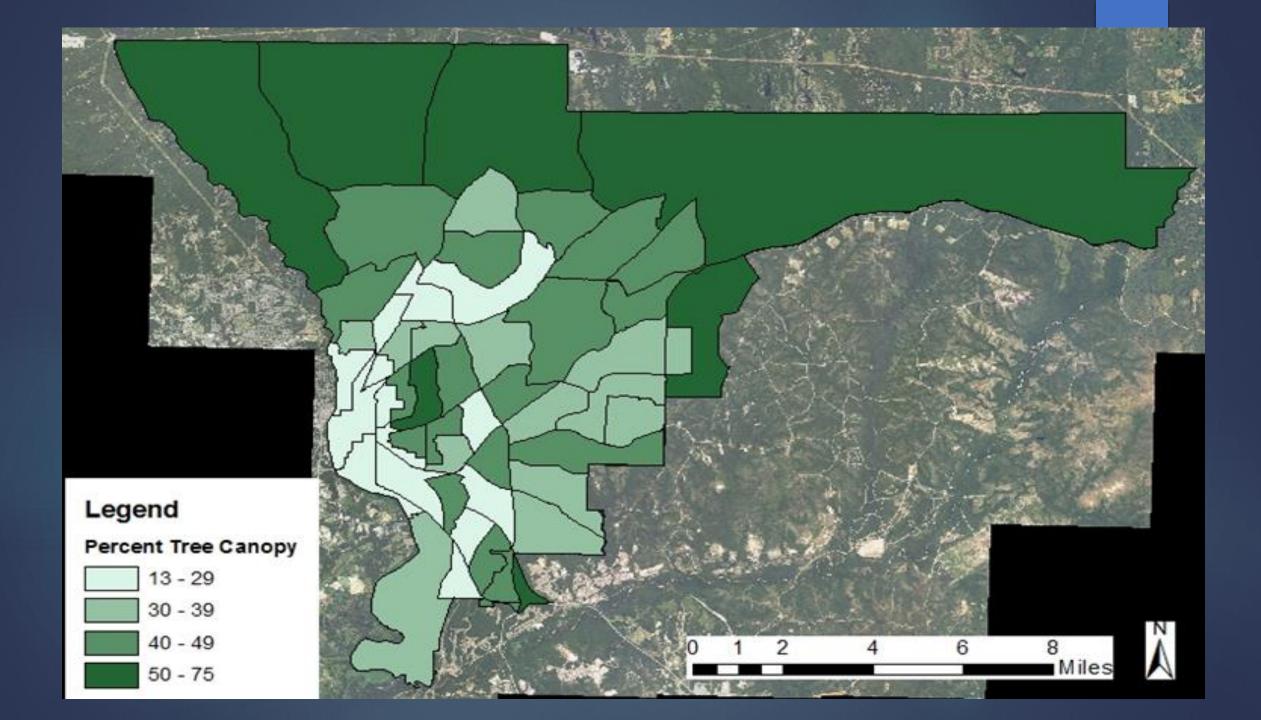
2016 Study

52% Overall

13 - 29%14 tracts30 - 39%13 tracts40 - 49%17 tracts50 - 75%7 tracts

51

- Looking for historical studies for comparison
- Will evaluate every 10 years



Urban Forestry -Background

Annually

- Plant 600-800 trees per year during January – March
- Remove 700-800 trees/year

Upon request

- Respond to emergency calls
- Daylight signs
- Neighborhood cleanup
- Pruning
- Clear sight distance
- Evaluate trees
- Remove trees
- Maintain plantings

Planting

Not planting enough

Adjacent citizens approval is obtained before we plant new or replace in the right of way

Time consuming process to reach each homeowner

Cont. Tree Loss

- Trees Columbus has assessed Lake bottom area
 - 200 + trees for removal
 - 900 + trees to plant
 - No resources for either

City Arborist List of Top Concerns

- 1. Replace trees removed during the year
- 2. Trees on Broadway
- 3. Plant in older neighborhoods with low tree canopy
- 4. Evaluate gateways for needed improvements

Recommended Level of Service

- 1. Tree Planting Plant 1,200 1,500
 - 1. Needed to accomplish:
 - **Operating Budget:**
 - 2 Equipment Operators
 - 800 additional trees
 - Gator bags Rent backhoes for 3 months 12 Temp's for 3 months

Annually: \$ 84k/yr \$120K/yr \$ 30k/yr \$ 16k/yr <u>\$ 62K</u> \$312k/yr Capital: 2 Watering trailers with trucks \$ 82K

Maintenance

Pruning is currently on request only

Need to become more proactive with clear sight distance, low hanging limbs, etc.

Need a minimum of 2 pruning crews

Create routes for pruning priorities

Current and Recommended Levels of Service - Pruning

Establish Routes for proactive, cyclical pruning Need:

Operation budget: ▶ 2 Pruning crews of 3 - 6 total \$ 250k/yr ►Capital ▶ 2 Bucket trucks @ \$180k Ea. ▶ 2 Chippers with trucks @ \$170K Ea. ► Work Zone Safety and other Total: Misc. eq.

\$ 360 k \$ 340 k \$ <u>20 k</u> \$ 720 k

Questions