



**CITY OF UNIVERSITY CITY
REGULAR MEETING OF THE URBAN FORESTRY COMMISSION
Centennial Commons 7210 Olive Blvd.
Monday, November 25th, 2024
1:00 P.M.**

AGENDA

- a) MEETING CALLED TO ORDER**
- b) ROLL CALL**
- c) APPROVAL OF AGENDA**
- d) UNFINISHED BUSINESS**
 - a. Forestry Commission Report
- e) NEXT MEETING DATE**
- f) ADJOURNMENT**



Forestry Commission Report

November 21, 2024

DRAFT

History

U City approach to forest husbandry from 2010 through 2018 was primarily three-fold;

- respond to resident complaints and concerns about city managed street trees
- care of trees in parks as issues arise
- clean up from storm damage to city managed trees

In summary, the Forestry Department was reactionary in it's care for City managed trees.

Recent History

- In 2020 a tree inventory was commissioned to catalog all City Managed trees; including size, species, and geo-location.
- As a result of this study, an annual pruning program was initiated to cycle through the entire city every 5 years.
- The Forestry Commission has come under new leadership, brought in new members and envisioned the plan we will present to you.

With new leadership now on the commission, accurate data and a plan, U City can improve it's Urban Forest.

2023-2024 Forestry Commission Plan

In May of 2023, the Forestry Commission determined that it would be important to identify key performance indicators to:

- objectively measure the health of our city managed trees and regularly report its status
- Compare U City's performance against established standards
- Identify needs for consideration in the Forestry Division Budget
- encourage good tree husbandry of privately owned trees by residents.
- Create a Resident Communication Plan

Key Performance Indicators (KPIs)

1. Canopy Coverage
2. Numbers of trees
3. Number of trees pruned, planted or removed
4. Tree species diversity
5. Tree size class distribution
6. Percentage of contract versus in-housework
7. State / County tree management
8. New planting areas established
9. Resident communication

The indicators measure areas of achievement and areas for improvement.

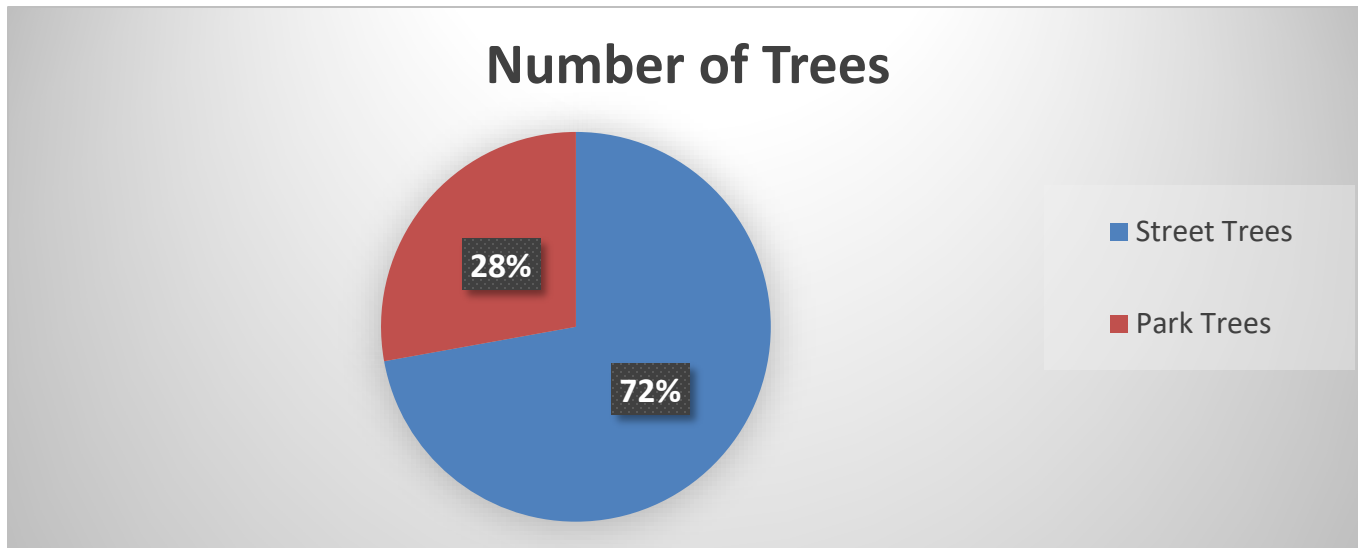
Canopy Coverage

The goal of tree coverage supported by the National Forestry Service is 40%.

The Forestry Commission completed a “1 Tree Mapping Plan” of University City and determined the actual Canopy Coverage is approximately 35%?

More aggressive annual planting is required to retain the status quo, to improve on our goals and maintain the goals.

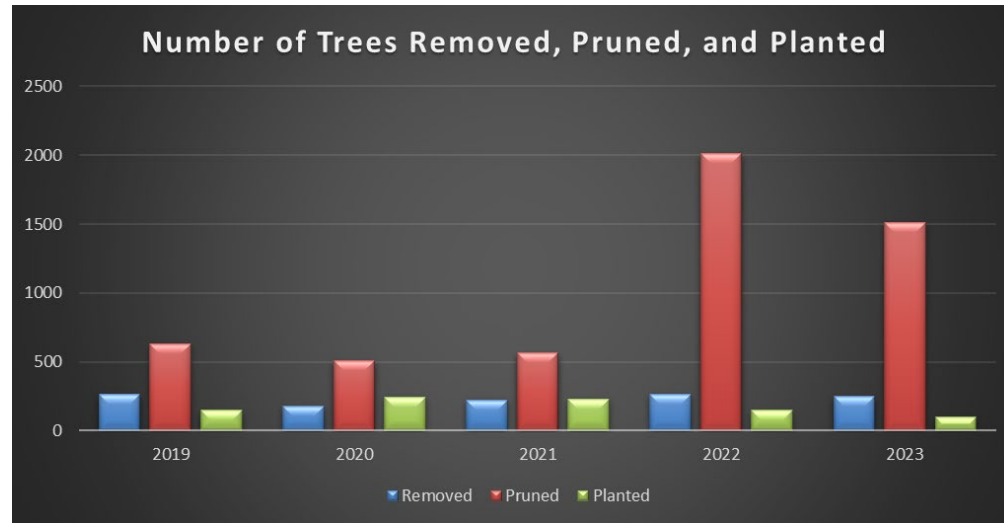
Number of Trees



- 7,721 Street Trees
- 2,978 Park Trees (excludes Ruth Woods)
- 521 Vacant Sites where trees and stumps were removed and new trees should have been added but were not

Filling the vacant tree sites would significantly improve the tree canopy deficit in the future

Number of trees removed, pruned, and planted



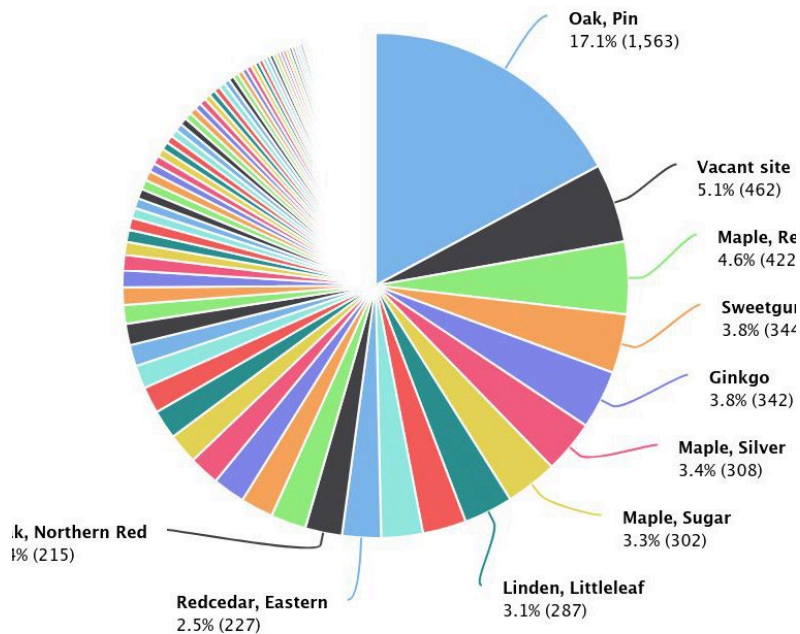
Number of trees pruned increased significantly in 2022 due to the addition of an annual pruning cycle.

- Pruning cycle is being done entirely by contractors.
- Planting is being done by in-house staff and has gone down due to being overwhelmed by storm cleanup and keeping up with removals.
- Removals are staying consistent with the allocation of more money for contractors.

The number of new trees planted has decreased over the last four years and is not keeping pace with needs.

Street tree species diversity

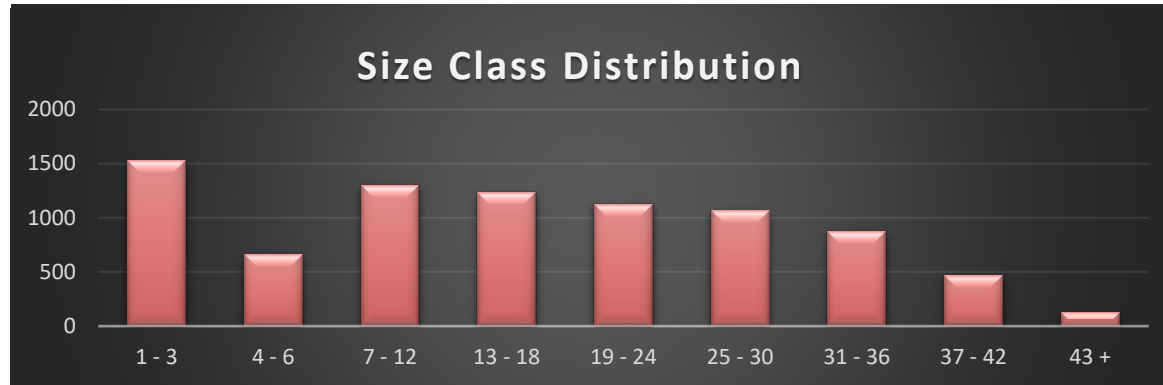
Count per (Common) Species



- 170 Different tree species managed on the streets
- Pin Oak is the number one species by count with 17% total
- Vacant sites are the next most prevalent
- Industry standard is no more than 10% of any tree species

Tree planting must fill the vacant tree sites and targeted replacements must improve the diversity.

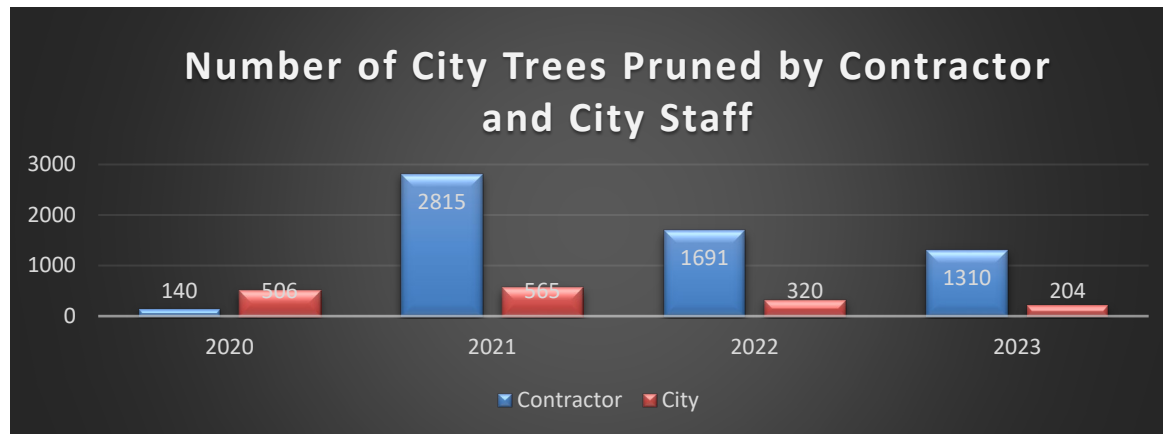
Tree Size Class Distribution



- Size class distribution of a healthy urban forest should be a bell curve
- New plantings are not happening as shown in the 4-6 classification

Jacob will delete 1-3 and make recommendations

Percentage of contract versus in-housework. Pruning



- Pruning cycle started in 2022 **Jacob to check why 2021 is up**
- City staff went from 3-2 employees in 2020

Percentage of contract versus in-housework. Planting



- Ash tree removal and new species replacement is by outside contractors. This program expires in 202x.
- In-house staff provide better quality work than outside contractors and would be preferred over outside contracts.
- Staffing restrictions and storm cleanup limited planting time in 2022 and 2023.

Additional staff would improve numerous Key Performance Indicators.

State / County Tree Management

Some of the most high-profile tree lined streets in University City are not maintained by our Forestry Division because they are the responsibility of the County. These 519 trees equates to 7.6% of the street trees in U City.

The county only prunes only on request, they remove when needed and do not replace trees. Trees are distributed as follows:

- Delmar – 230
- Hanley – 64
- Midland – 158
- North and South, McKnight, Pennsylvania and Vernon – 67

University City needs to take the responsibility for managing these trees in order to ensure good husbandry of this significant asset.

New planting areas established

“Heat islands” form when pockets of hot air reflected from hard surfaces such as buildings and streets create an unusual body of heat.

St. Louis City has designated funds to identify heat islands and address them by adding new trees.

University City also has areas that could be considered heat islands. Currently, we have no analysis of heat islands in our community.

The Commission recommends funding sources be identified to undertake a heat island study.

Resident Communication

The Commission has formed a sub-committee which has completed significant work on goals

- 15 topics have been identified
- 11 communication methods currently available have been identified
- Collaboration with other U City Commissions has begun.

At this point, U City communications staff has not yet supported the Commission's growing list of desired communication.

Issues impact on Key Performance Indicators

Our summary evaluation is that insufficient resources have been provided within the University City budget to grow our Forestry Division staff and to equip this staff to meet the goals defined by our KPIs.

Trees are a major value asset for University City and we have been taking them for granted. Planting and pruning is the best way to maintain this valuable asset. Trees take a long time to grow but can be lost more quickly if proper husbandry is not a habit.

The KPIs are designed to provide year to year consistent reporting to measure the health of our tree eco-system. As the concerns grow about climate change we must invest in the Urban Forest each year to avoid losing it over time.

Ongoing measurement will track the performance of our goals.

Major Issues Identified

- A. Forestry staff consists of 2 persons; which often is not sufficient to support needed maintenance let alone improvement of our KPIs
- B. Forestry equipment is old and needs updating.
- C. There are 491 planting sites where trees have been removed and have not been replaced?
- D. There are 519 State / County street trees within U City that are not managed except for removal and storm damage clean up.
- E. U City communications staff has not yet supported the Commission's growing list of desired communication.
- F. Current Storm Cleanup Policy for a major storms detract from Forestry's daily mission.

The Forestry Commission recommends the City Council investigate possible funding sources to improve the Urban Forest of University City.



Forestry Commission Report

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Appendix

Important Definitions

- **City of University City Tree Ordinance:** University City Ordinance 6670
- **City of University City Tree Manual:** A companion to the Ordinance to aid in education
- **Urban Forest:** The care and management of single trees and populations in urban environments
- **Canopy Coverage:** The measurement of ground surface covered by the branch spread of trees
- **Heat Islands:** Infrastructure that absorbs the sun's heat and reemits it into the atmosphere
- **Standards:** Established Goals for Urban Forests
- **Key Performance Indicators:** Methods of measurement of Goal achievement
- **Tree Types**
 - **Street Tree:** A tree located on the City right of way along a public street
 - **Privately Owned trees:** A tree located on private property and is not a City tree
 - **Park Trees:** Trees located in parks
 - **Ruth Woods Trees:** Trees located in Ruth Woods which are not generally maintained by Forestry
- **Diameter at Breast Height:** The size of a tree measured at 4.5 feet from the soil level
- **New Planting Areas:** Places where trees could be planted but, have not been inventoried
- **Vacant Sites:** Site used to have a tree but, it was removed and not replaced
- **In-House Work:** Work performed by University City Staff (or Volunteers)
- **Contracted Work:** Work performed by contractors hired by University City Forestry

Established Industry Standards

- Canopy Coverage-Previously set at 40% by United States Forest Service-Currently percent is set by the entity managing the urban forest
- Tree Species Diversity- Santamour 1990 no species should exceed 10%
- Tree Size Class Distribution has historically been based on a linear basis meaning-----
- Pruning Cycle-Every 3-8 years based on when trees need structural pruning and deadwooding

Deleted Slides

Objectives of Today's Presentation

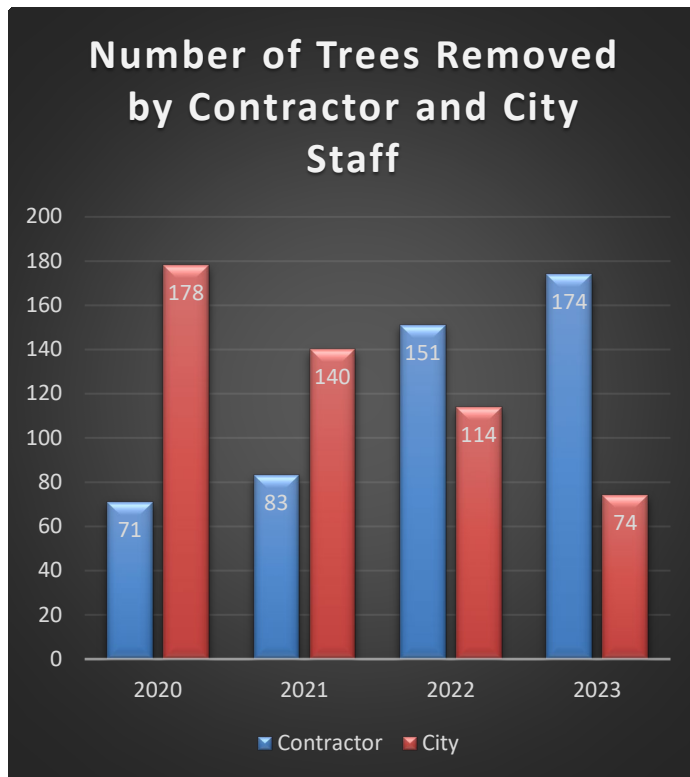
- To Establish Standards for University City's Urban Forest
- To track University City's performance against Key Performance Indicators
- To Identify Issues to Improve the Urban Forest

Park Trees by Distribution

- This is a set of new slides
- Need to address when Ruth Woods is included and excluded

End of August 14 Meeting

Percentage of contract versus in-house work. Removals



- More contract work done because of losing city staff
- Number of tree removals has stayed somewhat consistent

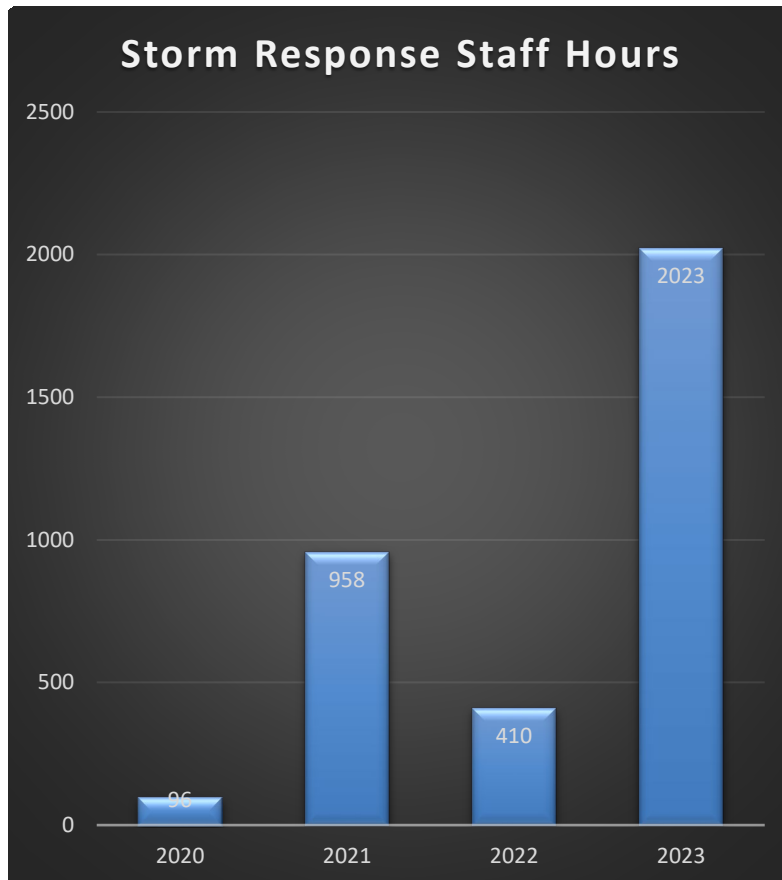
Volunteer hours contributed

Need a graphic and a comment on significance.

Describe tree pruning class and purpose and potential savings to the city

Eliminate page

Storm response Staff-hours required



Hours do not include parks and street department staff hours

New storm policy was added in 2021

Admin 2021 states Forestry will pick up private trees downed by a storm. This over taxes city forestry staff and over taxes chip distribution.

Needs a better coordinated plan.

Unpredictable issue will increase with crimate change and serving private owners takes away from Forestry duties.

Watering man-hours required

Need a graphic and a comment on significance.

Is this an opportunity for volunteer crews?

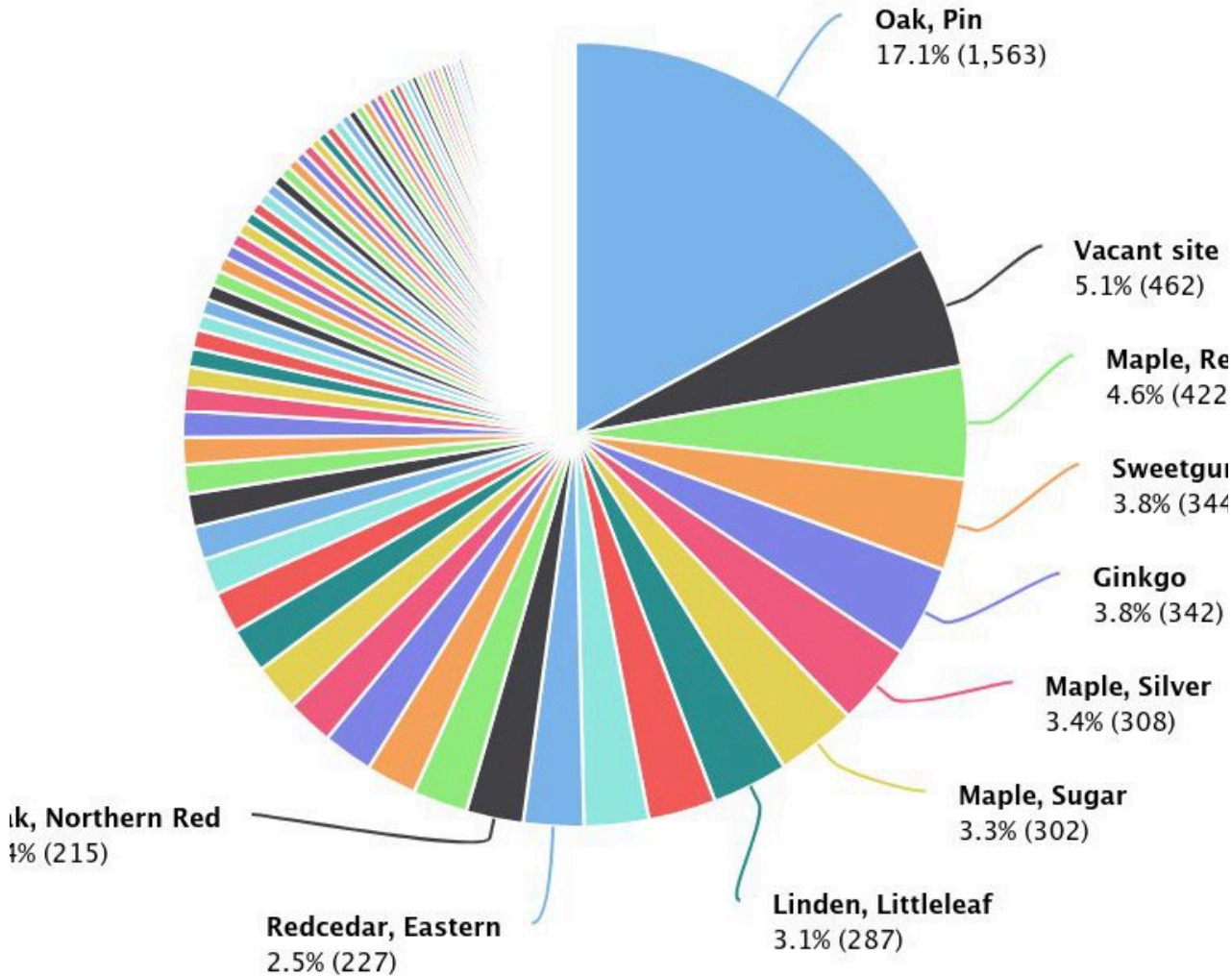
Another unpredictable issue that takes away from Forestry Duties.

May delete

An annual pruning program was initiated to cycle through the entire city every 5 years. The pruning of large trees was contracted out to commercial arborist and pruning of smaller trees was completed in-house by the U City Forestry Division.

Tree Pruning Plan

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