



**CITY OF UNIVERSITY CITY
REGULAR MEETING OF THE URBAN FORESTRY COMMISSION
Centennial Commons 7210 Olive Blvd.
Wednesday, September 11th
2024, 6:00 P.M.**

AGENDA

- a) **MEETING CALLED TO ORDER**
- b) **ROLL CALL**
- c) **APPROVAL OF AGENDA**
- d) **APPROVAL OF MINUTES – August 14th, 2024**
- e) **CITIZEN PARTICIPATION**
- f) **DEPARTMENT REPORT**
- g) **COUNCIL REPORT**
- h) **NEW BUSINESS**
- i) **OLD BUSINESS- Review of Draft Forestry Report**
- j) **COMMISSION COMMENTS**
- k) **NEXT MEETING DATE**
- l) **ADJOURNMENT**

DRAFT

Forestry Commission Report

Updates per our Meeting
14 September 2024

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 Create Goals to Improve the Urban Forest

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
- Tree Size Class Distribution
- Pruning Cycle-Every 3-8 years based on when trees need structural pruning and deadwooding
 - Measurement of Standards to be provided by Jacob

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 ITS CARE FOR CITY MANAGED TREES

More 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 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.

2023-2024 Forestry Commission

- 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
 - encourage good tree husbandry of privately owned trees by residents.
 - Identify needs for consideration in the Forestry Division Budget (Placeholder = not agreed upon)
- By March 2024 the Commission had identified 12 key performance indicators to measure performance to goals.

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-house work **One word?**
7. Volunteer hours contributed
8. Storm response man-hours required.
9. Watering man-hours required.
10. State / County tree management
11. New planting areas established
12. Resident communication

Canopy Coverage

Goal – 40%

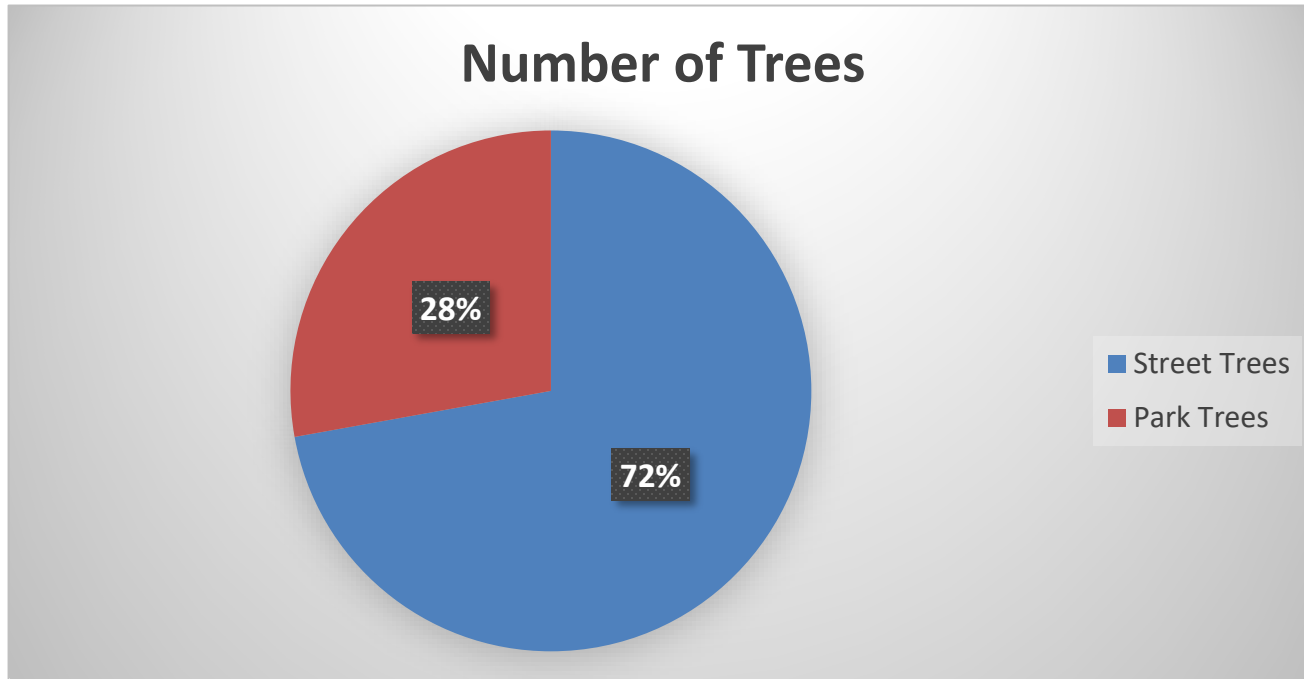
This goal is supported by the National Forestry Service

Current – 35%?

Current number is good, but improvement is at risk due the many mature trees which may not survive the coming decades ~~some due to the ash borer.~~

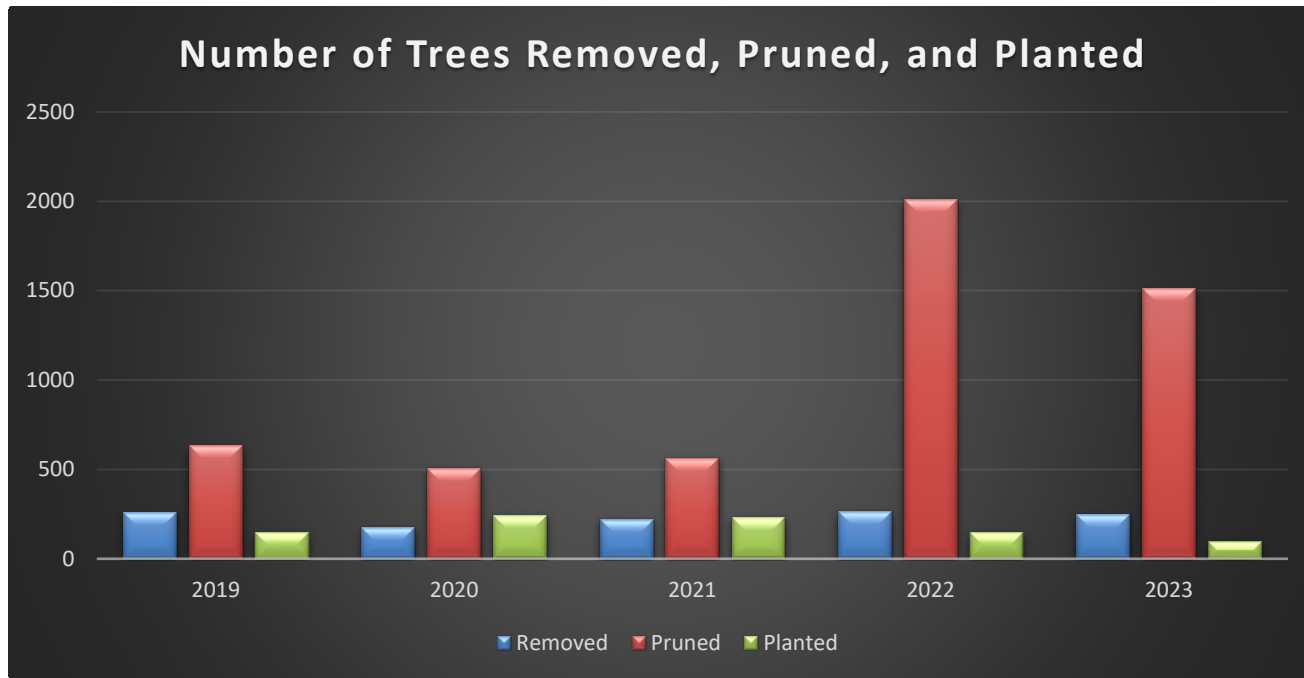
More aggressive annual planting is required to **achieve the status quo and to** archive our goal and maintain it.

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**

Numbers of trees



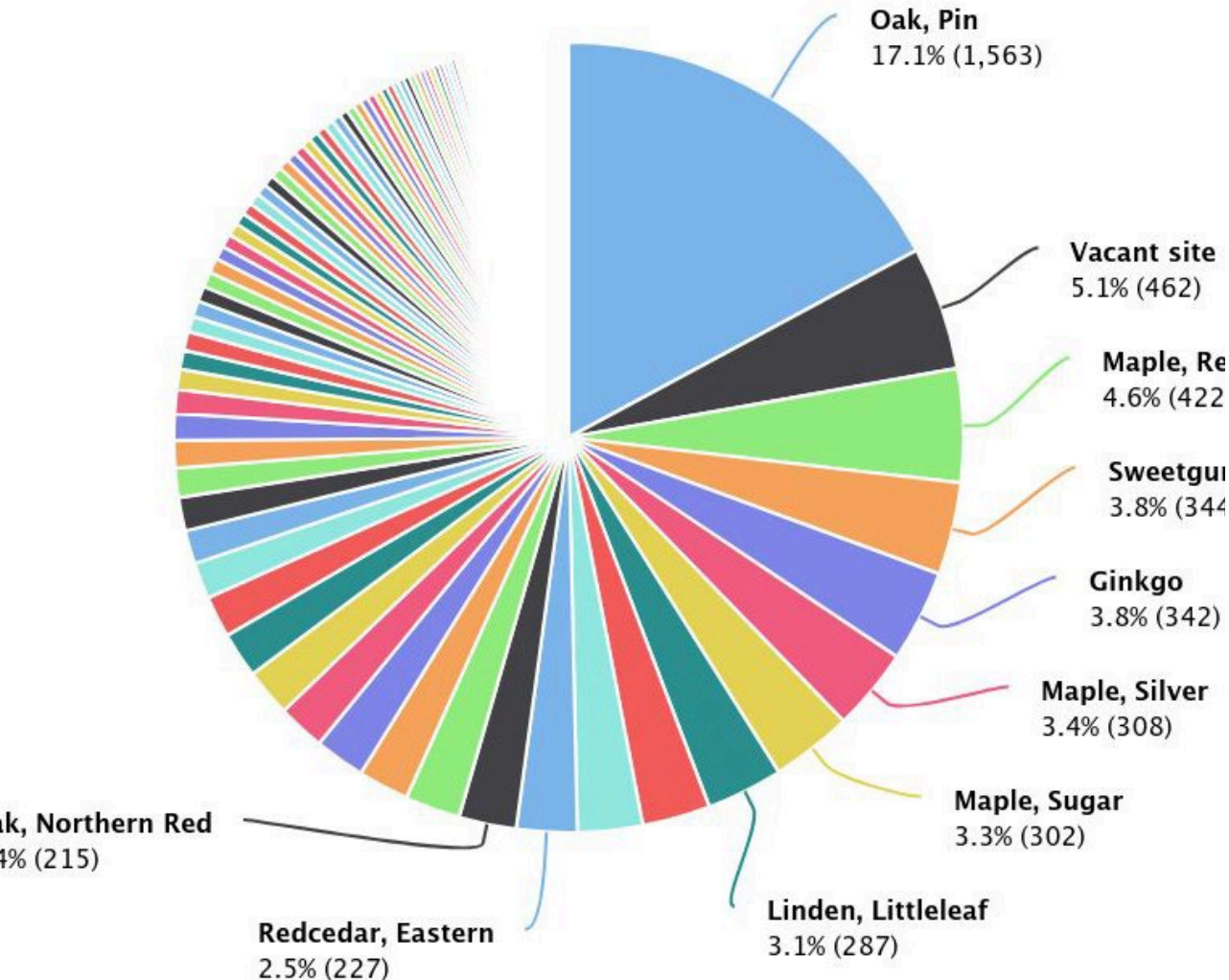
Number of trees pruned increased significantly in 2022 due to the addition of an annual pruning cycle.

- 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

Number of trees removed, pruned, and planted

Count per (Common) Species



Street tree species diversity

- 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

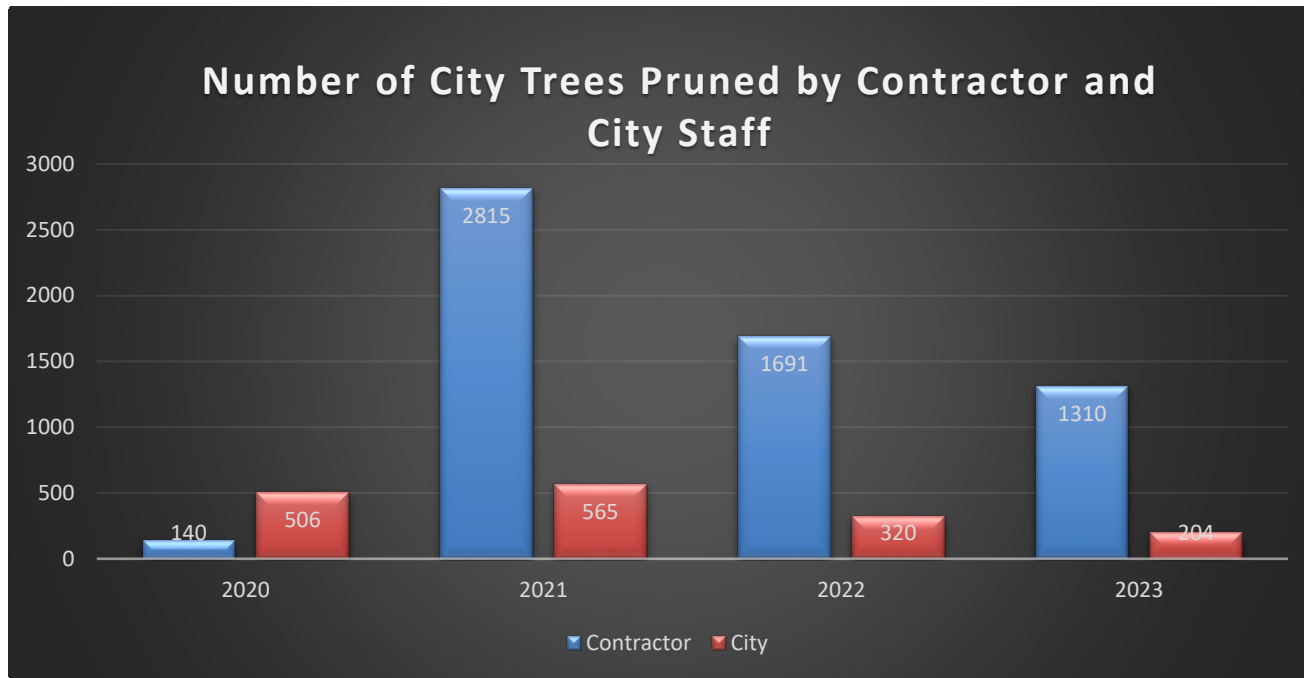


- Size class distribution of a healthy urban forest should be a bell curve
- New plantings are not happening as shown in the 4-6 classification
- ~~Higher number of small diameter trees could indicate newly planted trees not growing well~~
- **Jacob will delete 1-3 and make recommendations**

Tree size class distribution **Standard**

Park Trees by Distribution

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



- 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-house work. Pruning

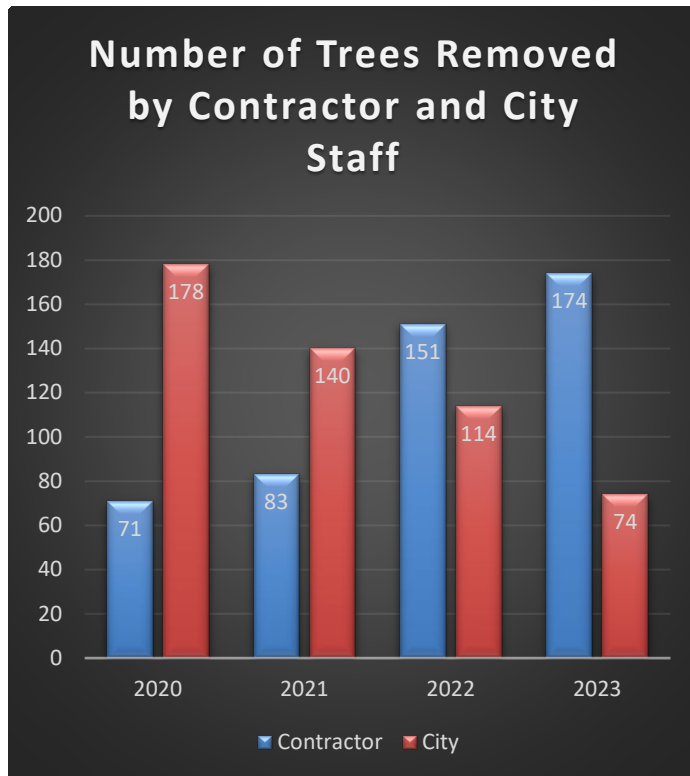
Percentage of contract versus in-house work Planting



- Ash tree removal and new species replacement is by outside contractors. This program expires in 202X.
- ~~Only trees planted by contractor are part of Ash removal and replacement program~~
- In-house staff provide better quality work than contractors and would be preferred over extended outside contracts
- Staffing restrictions and storms limited planting in 2022 and 2023.

End of August 14 Meeting

Percentage of contract versus in-house work. Removals



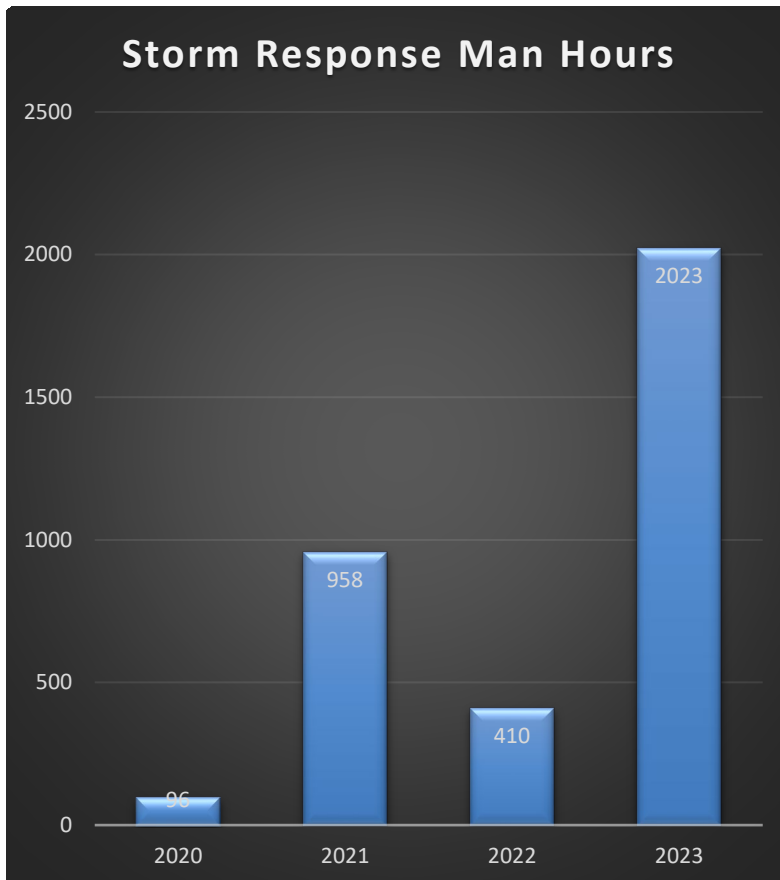
- More contract work done because of losing city staff
- Number of tree removals has stayed somewhat consistent

Volunteer hours contributed

Need a graphic and a comment on significance.

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

Storm response man-hours required



Hours do not include parks and street department staff hours

New storm policy was added in 2021

Watering man-hours required

Need a graphic and a comment on significance.

Is this an opportunity for volunteer crews?

State / County tree management

Some of the most beautiful tree lined streets in University City are not maintained by our Forestry Division because they are the responsibility of the State or County – 519 trees

- Delmar – 230
- Hanley – 64
- Midland – 158
- North and South – 22
- McKnight/Woodson – 12
- Pennsylvania – 2
- Vernon -31

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 have been in the news this summer. St. Louis City has designate 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, but recommend this be undertaken and funding sources identified to address them.

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.

ISSUES: At this point, U City staff is unable to support the Commission's growing list of desired communication.

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 have not been replaced **due to ?**.
- D. There are 519 State / County street trees within U City that are not managed except for removal and storm damage clean up. **This equates to 7.6% of the street trees in U City.**
- E. Resident communication methods are available but U City staff is unable to support the Commission's growing list of desired communication **due to?.**

Issues impact on KPIs

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

Trees are a major value asset for U City and we have been taking them for granted. We have many wonderful trees in our City but also sufficient planting and pruning every year is the best way to insure the future. 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 are in a good position with our current tree canopy, but must invest in it each year to avoid losing it over time.

Are there established standards that support our KPI's