

Board Presentation September 3, 2019



















UP WITH TREES MISSION

To beautify greater Tulsa by planting trees and to create urban forestry awareness through education.

Steve Grantham Executive Director Taylor Melone

Program Director

Mike Perkins

Director of Operations

Planting the seeds for a better tomorrow.

In the last four decades, we have planted over 31,000 trees at more than 750 locations throughout Tulsa. We plant along streets and trails, in parks, schools, fire stations, neighborhoods and many other public properties.



Tulsa Public School Partnership

The properties of Tulsa Public Schools include over 4,200 trees on more than 400 plantable acres, constituting an overall canopy coverage of 5%. We would like to achieve a canopy goal of 10% for each campus. With a generous donation from the Holliman Family Foundation and working with the Bond Department on upcoming construction projects, Up With Trees will be able to help us meet this goal by planting on each TPS campus in conjunction with the Tree School education program. Data shows that trees contribute to increased educational development through increased attendance rates, improved social skills and personal efficacy, and decreased misbehavior in the classroom. Additionally, these trees provide beauty and shade, as well as benefits to air and water quality, energy savings, wildlife, public health, and the socioeconomic strength of Tulsa.





Up With Trees Goals For The Partnership

GOAL 1: Establish Planting and Maintenance Master Plan

GOAL 2: Attain 10% Canopy Goal

GOAL 3: Increase energy efficiency

GOAL 4: Provide an educational program to engage students in a STEM-oriented learning environment, while utilizing trees as a cross-curricular learning tool

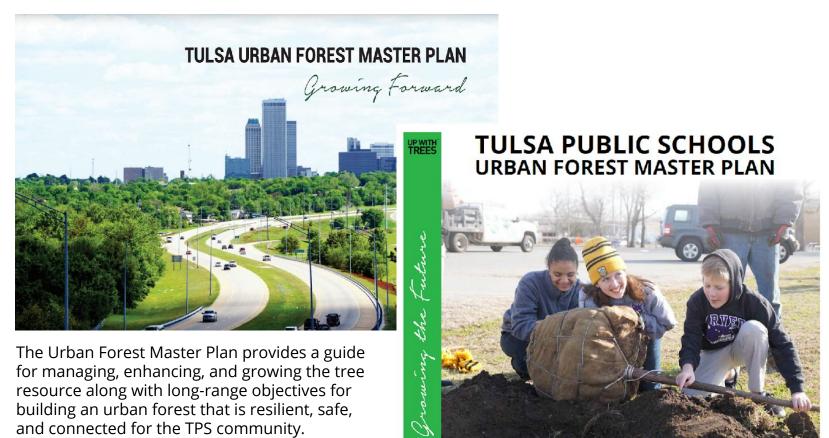
GOAL 5: Decrease or eliminate the cost of irrigation installation and maintenance

GOAL 6: Improve morale through inviting campuses, improved student behavior, and increased educational development

GOAL 7: Design and implement an Emerald Ash Borer mitigation plan, to alleviate the loss of over 250 ash trees on Tulsa Public School properties

Urban Forest Master Plan for Tulsa Public Schools

 Develop an Urban Forest Master Plan for Tulsa Public Schools that will mirror the Tulsa Urban Forest Master Plan that was adopted by the City of Tulsa.





Tree School Program





TREE SCHOOL





• Up With Trees has planted at more than 70 schools, 60 parks, 15 neighborhoods, 20 private properties, and 600 public streets and highway locations in Tulsa County.



Before and After Pictures of Hamilton Elementary

- 2017:
 - Planted 288 trees
 - 6 schools
- 2018:
 - Planted 720 trees
 - 17 schools
- 2019:
 - Over 800 trees will be planted
 - 15 schools



SCHOOLS

Outdoor Classroom at Hamilton Elementary





Before and After at Bell Elementary School



<u>UpWithTrees.mp4</u>





Questions?



Appendix Slide

Links to the City of Tulsa Plan and the Draft Plan for Tulsa Public Schools

Link to the Tulsa Urban Forest Master Plan

https://issuu.com/upwithtrees/docs/tulsa_ufmp_final_compressed

Link to the **Draft** Tulsa Public Schools Urban Forest Master Plan

https://drive.google.com/file/d/1LJftw2P8FoDDmsp4vrzqZrVRbW85_9RD/view?usp=sharing





TULSA PUBLIC SCHOOLS URBAN FOREST MASTER PLAN



EXECUTIVE SUMMARY

This Urban Forest Master Plan (UFMP) provides a guide for managing, enhancing, and growing the tree resource along with long-range objectives for building an urban forest that is resilient, safe, and connected for the TPS community.

The structure and organization of the UFMP are based on understanding what we have, what we want, how we achieve our goals and evaluating how we are doing. This structure, referred to as adaptive management, provides a good conceptual framework for managing urban forest resources and is commonly used for resource planning and management (Miller, R.W., 1988).

The plan development process involved a comprehensive review and assessment of the existing urban forest, including composition, value, and environmental

benefits. There are multiple stakeholders, internal and external, who play a role in the planning, design, care, and advocacy for the trees on Tulsa Public Schools campuses. These stakeholders include district and campus administration, grounds personnel, and faculty who contributed to the development of this Plan.

This plan also includes educational programming across 65 Tulsa Public Schools campuses around the importance of trees and how they impact student lives. The Up With Trees Tree School program provides students a handson application of their school's lessons in math, science, literacy, history, and art. The program encourages students to be active outdoors, take an interest in beautifying their school, and participate in growing a healthy community.

TULSA PUBLIC SCHOOLS PROPERTIES HAVE:

4800+ TREES

400+ PLANTABLE ACRES 5%
TOTAL
CANOPY
COVERAGE



STUDENTS AT **65 CAMPUSES**WILL BE EDUCATED THROUGH THE TREE SCHOOL PROGRAM.

DATA AND PROCESSES

Through the inventory and health assessment process conducted in 2018 (see in Appendix), Up With Trees found the properties of Tulsa Public Schools to include over 4,800 trees on more than 400 plantable acres, constituting an overall canopy coverage percentage of 5%. Data show that trees contribute to improved educational development through increased attendance rates. improved social skills and personal efficacy, and decreased misbehavior in the classroom (Wolf, 2019). In collaboration with TPS Facilities, representatives from the school board, STEAM Academic Department, and the Education Service Center, Tulsa Public Schools has set out to achieve a canopy goal of a minimum of 10% for each of their campuses. An accurate and continuously updated tree inventory is essential to attaining a resilient, safe, and connected urban forest.



SCHOOLS WITH MORE TREES
CORRELATE TO IMPROVED
STANDARDIZED TEST SCORES
AND HIGHER GRADUATION RATES.

66

TPS has more than 80 school sites with a variety of grounds maintenance challenges including irrigation, tree placement with regard to mowing, trimming and future building expansion, and cost. A plan taking these and other factors into consideration would be critical to the success of a canopy expansion initiative at TPS.

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Gary Percefull

Tulsa Urban Forest Master Plan Advisory Committee Member Previous Board of Education Member

Urban Tree Canopy (noun): the layer of leaves, branches, and stems of trees that cover the ground when viewed from above.

MASTER PLAN PROCESS

ESTABLISH PARTNERSHIPS

IDENTIFY GOALS

COLLECT DATA &
STAKEHOLDER INTERVIEWS

DEVELOP EDUCATION PROGRAMMING WITH TREES

BUILD LONG-TERM
PLANTING AND
MAINTENANCE PROGRAM



<u>Tulsa Urban Forest Master Plan</u> <u>Digital Publication</u>

MASTER PLAN KEYSTONES



A **safe** urban forest that is regularly inventoried, to proactively identify structural defects and trees in poor condition, managed by well trained tree care personnel. Safety and health issues are addressed in a timely and efficient manner.



A **resilient** urban forest that is diverse in species and age distribution, where new trees are planted strategically to optimize establishment, tree health, and benefits.



An urban forest that **connects** the whole community to nature, where tree canopy and tree benefits are distributed equitably, for all Tulsa residents to enjoy, and where information and resources about Tulsa's trees are easily accessed and shared.







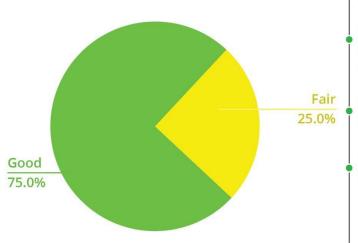
Students at Emerson Elementary School observing bagworm pest on bald cypress trees.

Zarrow International students measuring and assessing the health of their campus trees.

Students at Kerr Elementary School planting trees on their campus.

APPENDIX: INDIVIDUAL CAMPUS PLANS OWEN ELEMENTARY CAMPUS PLAN

Health and Distribution of Trees at Owen Elementary as of July 2017



CAMPUS ASSESSED

JULY 2017

MAINTENANCE WORK DONE

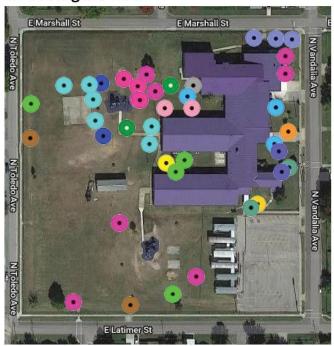
JANUARY 2019 ASH TREES REMOVED

20 TREES PLANTED

SPRING 2019 SEMESTER

20 STUDENTS EDUCATEDSPRING 2019 SEMESTER

SPECIES COMPOSITION as of August 2019







CHALLENGES/ OPPORTUNITIES

the school.

Opportunity to plant the southwest corner or add outdoor learning environment.

