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.

Goal 1: Ensure tree benefits for future generations through a sustainable planting program that encourages planting the right tree in the right place.

Recommendations:	Timeline	Costs	Partners
1. Plant trees that mature to a size that fits the soil volume and site:	**1-5 Years**	**$**	**Up With Trees**
Focus public outreach about tree planting on selecting trees that will not create future conflicts with infrastructure or utilities. Where space allows, plant large-maturing shade trees whenever possible.			
2. Plant Trees that are diverse and resilient to storms, pests, and anticipated climate changes:	**Ongoing**	**$$**	**Up With Trees, PSO, City of Tulsa**
Update the City Master Tree List as an interactive attribute-based online resource. Update print materials, such as the Public Service Company of Oklahoma's Tree Tips Booklet. Work with local nurseries to promote availability of proven and innovative tree cultivars. Promote xeric and drought-adapted species. Promote species with structural characterstics that are resistant to storm damage.			

Goal 2: Align policies with the community vision for canopy establishment.

Recommendations:	Timeline	Costs	Partners
1. Revise Landscape requirements for residential, commercial, and public buildings:	**1-5 Years**	**$**	**City of Tulsa**
Residential: Create policies that will result in sufficient shade trees to provide 50% canopy over neighborhood roads within 20 years. Commercial: Plant for shade on east and west sides of buildings, and for windbreaks. Public and Government Buildings: identify LEED certification goals for new facilities. Parking Lots: Conduct baseline parking lot tree sample inventory to assess canopy % of randomly sampled parking lots (Use canopy study GIS layer.). Gradually implement tree requirements to produce 50% shaded surface within 20 years of planting. All locations: Specify soil volume requirements based on mature tree stature. Encourage proper street tree planting with any sidewalk construction or road repair work.			
2. Incorporate urban forestry practices into the City's stormwater management efforts:	**3-5 Years**	**$$**	**City of Tulsa**
Collaborate with road-repair projects to integrate bioswales and street-side vegetated stormwater facilities			

Goal 3: Explore additional funding sources to reach desired level of services.

Recommendations:	Timeline	Costs	Partners
1. Establish one-time and ongoing funding needs.	**1 Year**	**$**	**Up With Trees, City of Tulsa**
2. Identify and apply for grants.	**1 Year**	**$**	**Up With Trees, City of Tulsa**

Goal 4: Achieve 30% urban tree canopy cover within 20 years.

Recommendations:	Timeline	Costs	Partners
1. Explore policies that will facilitate tree replacement when removal is necessary. These measures could include:	**1-5 Years**	**$**	**City of Tulsa**
Replace street trees within one year of removal.			
Develop a tree removal permitting system to track removals of public ROW trees.			
Create public outreach materials to define when tree removal permits are required.			
Train local commercial arborists and landscaping companies to recognize when a tree removal permit is required.			
Develop a notification protocol for non-compliant properties and fee structure for failure to replace street trees.			
2. Incentivise tree preservation on private property.	**5-10 Years**	**$**	**City of Tulsa**
3. Evaluate park tree replacement policy to address canopy loss from storm damage:	**5-10 Years**	**$**	**Up With Trees, City of Tulsa**
The City of Tulsa plants around 200 park trees per year, but over 7,000 park trees were lost in the 2007 storm alone. Based on canopy study and community feedback, street and park tree planting will need to be increased to match community expectations.			

Goal 5: Measure and communicate progress in UFMP implementation.

Recommendations:	Timeline	Costs	Partners
1. Annual review plans and report progress:	**Annually**	**$**	**City of Tulsa**
Review and Update the UFMP.			
Produce a State of the Urban Forest Report to benchmark achievements and identify areas of focus for the next year.			
2. Maintain management practices and promote program growth:	**Annually**	**$**	**Up With Trees, City of Tulsa**
Maintain Tree City USA status annually and apply for Growth Awards			
3. Measure citywide land cover changes:	**10 Years**	**$$**	**Up With Trees, City of Tulsa**
The City of Tulsa plants around 200 park trees per year, but over 7,000 park trees were lost in the 2007 storm alone. Based on canopy study and community feedback, street and park tree planting will need to be increased to match community expectations.			

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.

Goal 1: Maintain Public Trees Proactively.

Recommendations:	Timeline	Costs	Partners
1. Establish a city-wide tree inventory for Tulsa:	**1-5 Years**	**$$**	**City of Tulsa**
Update Up With Trees inventory continuously.			
Encourage other entities (ie Tulsa Public Schools, Tulsa County, City of Tulsa) to inventory all of their trees.			
2. Optimize tree maintenance to follow industry standards and best management practices:	**10-20 Years**	**$$$**	**Up With Trees, City of Tulsa**
Explore partnerships to ensure all public trees receive maintenance on a 4 to 6-year pruning cycle.			
Train tree care personnel.			
Implement trials of tree site changes such as the addition of mulch and xeric groundcover to reduce mowing maintenance.			
Provide structural pruning for young trees to develop a single central leader and well-spaced scaffold branches.			
Develop a Street Tree Master Plan.			
3. Formally establish the duties of the City Urban Forester to include overseeing all park tree management and providing oversight for street and stormwater facility trees:	**1-5 Years**	**$**	**City of Tulsa**
Include oversight of all park tree management and work review for street and stormwater facility tree pruning activities.			

Goal 2: Develop a Tree Risk Management Strategy.

Recommendations:	Timeline	Costs	Partners
1. Use Tree Risk Assessment (ISA TRAQ) when appropriate:	**1-5 Years**	**$**	**City of Tulsa**
TRAQ certified arborist conduct risk assessment for large trees where high value targets are present.			
2. Establish a comprehensive tree emergency response and recovery plan:	**1-5 Years**	**$$**	**City of Tulsa**
Engage stakeholders to coordinate storm response among multiple departments.			
3. Identify funding opportunities for disaster recovery:	**Ongoing**	**$**	**City of Tulsa**
Explore using disaster mitigation plans and funds to address potential urban forest threats or hazards.			

Goal 3: Monitor the resource for exotic and invasive pests and diseases.

Recommendations:		Timeline	Costs	Partners
1. Develop an EAB Management plan:		**1-5 Years**	**$**	**City of Tulsa**
2. Monitor for urban forest threats:	Using updated inventory, project ash treatment and removal strategies over 5-10 years.	**5-10 Years**	**$**	**Up With Trees, City of Tulsa**
3. Develop public awareness of emerging urban forest pests and diseases:	Work with USDA to position traps in strategic locations. Facilitate commercial arborist pest ID training. Use existing national communication and marketing tools to implement a local "Don't move firewood" campaign.	**1-5 Years**	**$$**	**Up With Trees, Oklahoma Agricultural Experiment Station**

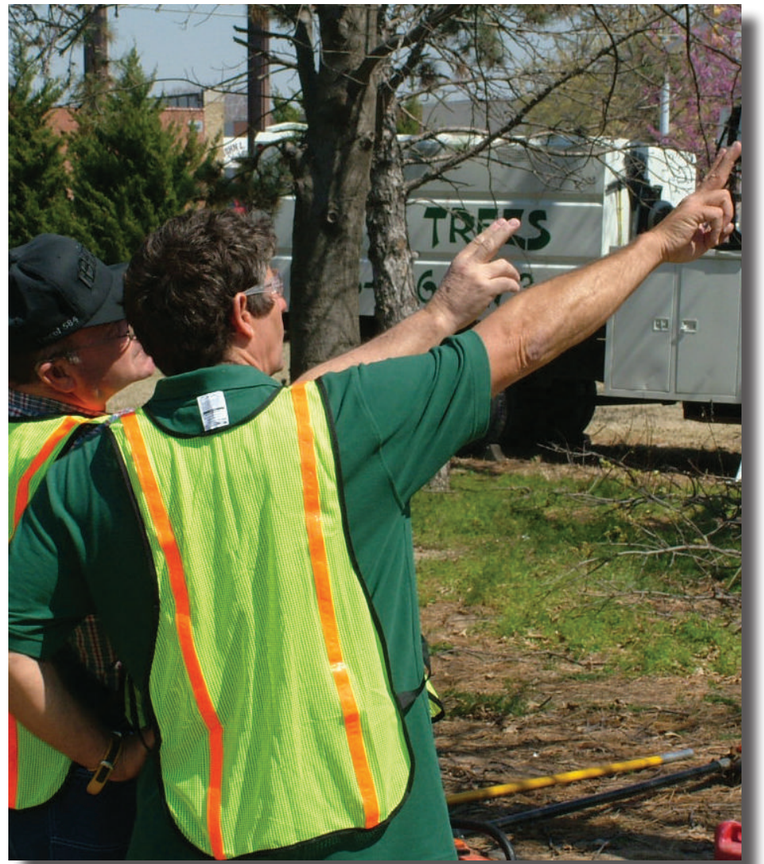
Case Study: Look Before you Leaf

Poor tree structure, ice and wind storms, and unmonitored internal decay can all cause tree or limb failure, impacting public safety. To see a prime example of a model program focused on urban forest safety, Tulsa residents can look no further than their own backyards, where many fenceline trees are in Public Service Company's electric utility easement. When vegetation grows into close proximity or contacts a high-voltage utility line, service interruptions may occur, and electrocution or fire ignition is possible, so utility companies methodically inspect and maintain vegetation with the potential to cause a hazard.

In Tulsa, most of the electric utility easements are located behind properties, rather than along the roads, and there are many instances of fence-line trees (planted and volunteer) with the potential to grow toward utilities.

PSO's "Look Before You Leaf" tree planting philosophy provides guidance for tree planting within 40 feet from the lines. This includes recommending no trees at all within 15' on either side of utilities; small trees (under 30' tall at maturity) may be within 15-30' horizontally from the utility, medium trees (under 50') within 30-40', and large trees (51 feet and greater) should be planted no closer than 40' horizontally from the line.

PSO works diligently to inspect and provide line clearance for every tree along the utility easement on a four-year cycle. When trees are planted too close to utility lines, they can cause utility conflicts, and PSO proactively works with homeowners to conduct removals and provides vouchers for new replacement trees of appropriate stature. This program has been in effect since 2008 and, as a result, it is rare that trees require pruning more often than their 4-year cycle. Because of past successes, a new initiative was launched to conduct inspections outside the 80' wide utility impact area, to identify trees that are likely to fail in severe weather events.



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.

Goal 1: Ensure tree benefits for future generations through a sustainable planting program that encourages planting the right tree in the right place

Recommendations:	Timeline	Costs	Partners
1. Communicate the energy saving benefits of trees:	**5-10 Years**	**$**	**Up With Trees, PSO**
Construct pilot projects to partner with PSO to plant trees strategically to reduce peak load by shading buildings, and provide signage to publicize the energy benefits of trees. Include user-friendly tree benefit information into newsletters and press releases.			
2. Develop communication regarding various resources connected to trees available to the public:	**1-5 Years**	**$$**	**Up With Trees**
Develop an online interactive tree finder based on the reviesed Master Tree List.			
3. Build on existing partnerships with schools:	**1-5 Years**	**$$**	**Up With Trees**
Explore partnership with all of the local schools to create an awareness campaign about trees and education about trees for the students.			

Goal 2: Connect urban forestry partners through a single vision.

Recommendations:	Timeline	Costs	Partners
1. Engage stakeholders in understanding and promoting the urban forest:	**Ongoing**	**$**	**Up With Trees, City of Tulsa**
Maintain and cultivate relationships built during the UFMP development process. Convene meetings with elected officials to share the state of the urban forest update, annually.			
2. Convene key stakeholders regularly:	**Ongoing**	**$**	**Up With Trees**
Host community meetings such as 2015's Land Forum, or the 2016 Community Meeting to engage key urban forest stakeholders from business, agency, and community organizations, annually.			

Goal 3: Encourage public and private participation in urban forest management through volunteerism.

Recommendations:	Timeline	Costs	Partners
1. Expand and develop leadership in volunteer base:	**Ongoing**	**$**	**Up With Trees**
Establish a monthly treemail update targeted specifically for volunteers. Provide opportunities for volunteers to take leadership roles in managing the urban forest.			

Goal 4: Increase tree canopy coverage so that all people can enjoy the benefits of trees equitably.

Recommendations:	Timeline	Costs	Partners
1. Strategically plant trees in high-priority planting areas:	**Ongoing**	**$$$**	**Up With Trees, City of Tulsa**
Address council district canopy inequities by encouraging tree planting in low-canopy districts.			
Explore fruit tree planting partnerships with community gardens and schools.			
Target marketing outreach for tree give-aways to align with highest priority planting areas.			
Collect address of intended planting location from free tree recipients to track tree planting by neighborhood or census block.			
2. Develop and implement forestry practices and policies that protect birds, pollinators and other wildlife:	**1-5 Year**	**$$**	**Up With Trees, City of Tulsa**
Comply with all state and federal regulations that protect endangered and migratory species and nesting birds.			
Apply integrated pest management (IPM) strategies to determine appropriate responses to tree pests and pathogens.			
Promote important habitat plant species for cover, foraging, and nesting. Implement trials of tree site changes such as the addition of mulch and xeric groundcover to reduce mowing maintenance.			
Integrate wildflowers and monarch waystations into tree planting sites where appropriate.			

Goal 5: Focus on neighborhood-based initiatives and solutions to urban forestry issues.

Recommendations:	Timeline	Costs	Partners
1. Conduct public outreach to determine neighborhood challenges and opportunities related to trees:	**1-5 Years**	**$**	**Up With Trees**
Solicit community feedback at neighborhood association meetings, and other existing public forums.			
Promote multiple modes of communication, soliciting feedback by mail, email, and in person at community events.			
2. Explore opportunities for trained volunteers to serve neighborhoods through education, tree maintenance, tree planting, etc:	**1-5 Years**	**$**	**Up With Trees**
Establish training programs for neighborhood tree coordinators or establish an internship program.			
3. Facilitate community dialogue to establish a local vision for the care and growth of the urban forest:	**1-5 Years**	**$**	**Up With Trees**
Engage with the neighborhood to approve species to be planted, and priority locations.			