Community
Tree Shade
BLUEPRINT

A Guide for Creating Shade in Your Phoenix Neighborhood
Trees provide clean air, oxygen, food, shade, and habitats for animals. Planting trees is an investment in the future of your neighborhood, and brings Phoenix one step closer to becoming a sustainable and resilient city. Resilience is the ability to learn from past events, such as natural disasters, and strengthen responses to successfully adapt to future stressors. Planting trees will help Phoenix meet its goal to increase the tree canopy by 25% by the year 2030 as part of Phoenix’s Tree and Shade Master Plan.

The Community Tree Shade Blueprint explains how to design and implement a volunteer-led tree planting project; it also reviews the rules and procedures for planting trees in Phoenix, AZ.

This blueprint was developed during a pilot tree shade project in the Downtown Phoenix Triangle neighborhood (Grand Avenue to N 7th Ave and W Van Buren to W Roosevelt St) with support from the Resilient PHX and Love Your Block PHX initiatives, which are funded by grants from Cities of Service.

This information is intended as a guide. The educational and instructional materials referenced in this toolkit are for informational purposes only. The Blueprint is not meant to provide a step-by-step instruction manual for a resident or neighborhood group that may choose to plant a tree. Always research and plan any project you undertake thoroughly.

This publication can be made available in alternate formats upon request. Please contact Helping Phoenix Neighborhoods at admin@hpnphx.org for assistance.
PLANNING TOOLS

Hosting a Planting Day: Overview p. 3
Community Engagement p. 4
Location Selection p. 5
Picking a Tree Species p. 6
Data Collection p. 7

IMPLEMENTATION TOOLS

Tree Planting p. 9
Maintenance p. 10

CONNECT

Connect with the Resilient PHX and Love Your Block PHX teams to share your ideas, photos, metrics, and successes.

phoenix.gov/volunteer
Email loveyourblock@hpnphx.org Website hpnphx.org/cities-of-service/
Twitter@ResilientPHX Twitter/Instagram@loveyrblockPHX facebook.com/loveyrblockPHX/
PLANNING TOOLS

HOSTING A PLANTING DAY: OVERVIEW

1 Plan: Form a core group of community partners to define the project goal, timeline, and budget. Identify strategies and steps to recruit volunteers, raise funds, and implement the project. The core group will be responsible for securing the necessary resources, supplies, and donations to ensure the project’s success. If the tree planting is on private property or in the right-of-way, be sure to receive written permission from the property owner, or adjacent property owner, before starting the project. If planting along the sidewalk or right-of-way, be sure to follow City protocol. It helps to start small to ensure the project runs smoothly. Five to 25 volunteers is a manageable amount for smaller planting projects.

2 Outreach: Promote the tree planting project to recruit volunteers and ensure all neighbors, local businesses, non-profits, schools, and churches are aware of the project. Spread the word through email blasts, flyers, social media, newsletters, and knocking on doors to reach those who may not have access to a computer or social media. Share project details with City officials, such as the Mayor and your City Council member, so they can promote the project through their networks. Provide volunteers with event details such as the arrival time, parking information, meeting location, a brief schedule for the day, and list of volunteer activities. Volunteers should wear closed-toe shoes, gloves, and a hat.

3 Prepare: Contact the City’s Parks Department Forestry Supervisor at 602-495-3762 when the planting involves the right-of-way, a City park, or other city-owned land. Organize the collection and distribution of supplies and tools. For larger projects, divide volunteers into teams, assign team leaders, and notify leaders of duties. It may be helpful to provide a contact list as well. Complete any needed preparation work before volunteers arrive.

4 Document: Photograph the project location before, during, and after the event. Take before and after pictures of the same location to capture the impact of your project.

5 Implement: Secure the project location and set-up the supplies. Hold a brief meeting with participants to say thank you, and to give them directions and safety tips before the work begins. Monitor the volunteers’ progress and engagement levels throughout the event. Begin reassigning idle or additional volunteers to incomplete tasks an hour before the project ends. Begin collecting tools, litter, and leftover materials half an-hour before the event ends.

6 Recognize: Recognize volunteers, partners, and sponsors for contributing to the project. Thanking volunteers is an effective way to ensure they keep coming back to participate. Share pictures with volunteers, partners, and your community.

7 Sustain: Maintain the project to ensure it continues to be a community asset and does not become a blight issue. Sustainability relies on neighbors who buy into the project and its goals. Sustainability plans can include saving supplies for maintenance, hosting regular workdays, and conducting regular check-ins.
Your neighbors will be the key ingredient in revitalizing your neighborhood! Put your project into action by seeking out your neighbors to help plan and implement the tree planting. You can start by forming a core group of residents and community partners to identify the goal, create a timeline, recruit volunteers, and implement the project.

To ensure the whole neighborhood’s needs and voices are heard, establish a core group that represents the community. Consider creating a group of neighbors with diverse socio-economic backgrounds, genders, ethnicities, ages, and skills, including communication, planning, fundraising, and gardening/planting.

Develop an outreach strategy to notify and recruit neighbors of the project and invite them to volunteer on planting days. To notify residents about your event, consider posting on your neighborhood’s social media accounts, Facebook, Nextdoor, Instagram, and Twitter, as well as distributing flyers at churches, schools, grocery stores, and nearby businesses. A unique way to get youth involved is to host a poster design contest for the event flyer!

Tap into strong community networks already in place to get your neighborhood involved. Examples of neighborhood networks are community groups, church congregations, school parent/teacher associations or boards, local businesses, and the local police precinct. Notifying and inviting local police to the event will ensure volunteer safety when planting close to a road, and can be an opportunity to develop stronger relationships between police officers and community members.
Finding a location for your project is a key step to ensure the long term success of your tree planting. The core group must consider a variety of factors when choosing a site, such as the owner’s approval, and state and local laws.

Gaining the property owner’s written approval to host and/or maintain trees at your chosen site ensures the trees will not be removed and/or neglected. If the property has long term renters, ensure both the renter and owner approve of the planting and/or maintenance. The same applies to the property adjacent to the right-of-way. The right-of-way (ROW) is typically the strip of land between the street and the sidewalk (see above picture).

Prior to digging in the ground, you are required by Arizona law to have underground utilities located. Request by calling Blue Stake at 811 or 602-659-7500 or visit azbluestake.com. This is a free service.

The City of Phoenix restricts the height and type of tree permitted to be planted within the right-of-way and along private property when the vegetation impacts the public sidewalk and/or street. For more information about these restrictions, please visit phoenix.gov/streetssite/Documents/streetman.pdf (See pages 29, 30, 56, 57-70).

When considering a location along a road, plan to request a lane or road closure with the City of Phoenix Streets Department at least three weeks before the volunteer event.
Choosing the right tree species will determine the type of impact your project has on your community. To make sure your tree is a good match, consider the environmental conditions, resident needs, and the characteristics of the species.

Investigate the site’s environmental conditions that are likely to impact the long-term health of your tree, such as soil composition, sun availability, water access, and moisture levels. To ensure the species thrives in Arizona’s unique climate, look for species which grow in hardiness zones 9-10.

Understand the needs of the neighbor and property owner enlisted to care for the tree, and select a species to fit their requirements. For example, if the resident maintaining the tree has difficulty with mobility, perhaps consider a variety without fruit, which requires the caretaker to harvest the tree. Consider other characteristics in tree species, such as full-grown height, canopy spread and shape, growth rate, and if it is deciduous or evergreen (will it lose leaves in the winter).

For complete lists of plant species best suited for Phoenix, Arizona, please visit:

- [phoenix.gov/parks/parks/urban-forest/a-guide-to-trees-in-phoenix](http://phoenix.gov/parks/parks/urban-forest/a-guide-to-trees-in-phoenix)
- [cals.arizona.edu/maricopa/garden/html/plants/plants.htm](http://cals.arizona.edu/maricopa/garden/html/plants/plants.htm)

For free landscaping designs, please visit [arborday.org/trees/landscapeDesign](http://arborday.org/trees/landscapeDesign). If you require additional aid, contact a local arborist.
Collecting and analyzing data is key for demonstrating the success of your project because your neighborhood can demonstrate if the project goals were achieved. **You can use the collected data and analysis to show community members and potential funders the positive impact of the project.**

Consider what project goals your neighborhood wants to achieve and determine what data needs to demonstrate those results. Some examples of project goals for tree plantings are:

- number of volunteer participants
- number of flowers/shrubs/trees planted
- greenhouse gas benefits*

You can even survey or interview volunteers to understand perceptions, feelings, and attitudes regarding the project and the neighborhood’s conditions. These shared experiences will reveal stories that numbers can’t always tell.

Select a data collection method to support how your neighborhood plans to analyze and use the data. You can collect data using surveys, interviews, or direct observations. Consider documenting the neighborhood’s conditions before, during, and after the project to gather a complete evaluation of the project. The data collection process may provide an opportunity for resident volunteers with relevant skills to participate in the project.

* Refer to the city of Phoenix’s "Interactive Tree Inventory Website" resource at [phoenix.gov/parks/parks/urban-forest](http://phoenix.gov/parks/parks/urban-forest) for more information about each tree’s greenhouse gas, water, energy, air quality, and property benefits.
IMPLEMENTATION TOOLS

TREE PLANTING

Planting trees is an investment in the future of your neighborhood. Total cost varies per tree species, tree size, and tree nursery prices.

**MATERIALS**
- Tree (recommend 15 or 25 gallon)
- Mulch (amount determined by tree size)
- Stakes and twine
- Tools: round and squareshoes, pickaxes, stakes, ties (arbor tape hose/wire, auger (if necessary), and gloves
- First aid kit, water, and light snacks

**STEP-BY-STEP**

1. Dig each hole 3-4 times as wide as container/root ball and as deep as the trunk flare. Holes can be dug by hand or with heavy equipment.
2. Remove tree from container with caution, check the roots, and then place upright in the center of the hole.
3. Refill the hole halfway with soil and water until saturated, then add remaining soil & water.
4. Create a tree ring with soil or mulch, but keep at least 1 inch between trunk & soil/mulch.
5. The tree needs the most water during the first two years; follow instructions for proper watering, and avoid pruning or trimming.

**PRO TIPS**
- Plant where there is existing irrigation. You can also install irrigation or a rain-catchment system.
- If hand-digging, it's best to plant trees that are less than 15 gallons.
- Read more tips for planting with containers here: [arborday.org/trees/planting/containerized.cfm](arborday.org/trees/planting/containerized.cfm)
IMPLEMENTATION TOOLS

MAINTENANCE
Taking proper care of your trees demonstrates your commitment to your neighborhood. With the right steps, your community trees will prosper for generations to come.

CHECK LIST

✅ Water the tree with the amount the species requires, and take into account average local rainfall. If using ground irrigation, routinely check for leaks and test the system functions properly.

✅ Clear space around the tree of litter, debris, and dead branches.

✅ Prune only damaged or dead limbs within the first year. Practice spacing branches to remove competition. Keep in mind over-pruning can damage or kill your tree. Visit phoenix.gov/parks/parks/urban-forest. Click on “Don’t Top Trees” and “How to Prune Young Shade Trees” for more information.

✅ Harvest fruits when they fall to the ground to keep the area clear. Rotting fruit can attract unwanted rodents.

✅ If the trees are planted along the sidewalk, ensure it does not visually or physically obstruct traffic or pedestrians.

TREE CARE PROVIDERS IN ARIZONA
- International Society of Arboriculture isa-arbor.com
- The American Society of Consulting Arborists asca-consultants.org
- The Tree Care Industry Association tcia.org
- The Arizona Community Tree Council aztrees.org
- The Arizona Landscape Contractors Association azlca.com
- Desert Botanical Garden – Desert Landscape School dbg.org
ABOUT RESILIENT PHX

Resilient PHX builds capacity through systems creation and strengthening networks to enhance resiliency in the City of Phoenix. With our partners Cities of Service, AmeriCorps VISTA, and the Tohono O’odham Nation, we strive to bridge the gap between the City, community groups, and organizations to combat extreme weather events and bolster community-level response.

ABOUT LOVE YOUR BLOCK PHOENIX

Love Your Block Phoenix is a mini-grant program that engages Phoenix community members in revitalizing their neighborhoods, one block at a time. This program is funded by Cities of Service and is supported by the City of Phoenix City Manager’s Office, Mayor’s Office, and Neighborhood Services Department.

In June of 2015, Cities of Service awarded seven cities with two AmeriCorps VISTA members and $30,000 each to plan and implement the Love Your Block mini-grant program in low-to-mod income neighborhoods over a three-year period. Each year, five neighborhood groups within the Love Your Block initiative boundary are awarded $1,000 to make a change they wish to see in their neighborhood. The program encourages community groups to identify priority projects and develop volunteer-fueled solutions. To learn more, visit phoenix.gov/volunteer and follow @loveyrblockphx on Twitter and Instagram.

ABOUT CITIES OF SERVICE

A national nonprofit organization, Cities of Service helps mayors and city leaders tap the knowledge, creativity, and service of citizens to solve public problems and create vibrant cities.

Cities of Service works with cities to build city-led, citizen-powered initiatives that target specific needs, achieve long-term and measurable outcomes, improve the quality of life for residents, and build stronger cities.

Started in 2009 by New York Mayor Michael R. Bloomberg, the Cities of Service coalition is now comprised of over 225 cities in the US and UK, representing nearly 55 million people in 45 states, and more than 10 million people in the UK.