# 2025-2029

# ARIZONA URBAN AND COMMUNITY FORESTRY 5-YEAR STRATEGIC PLAN

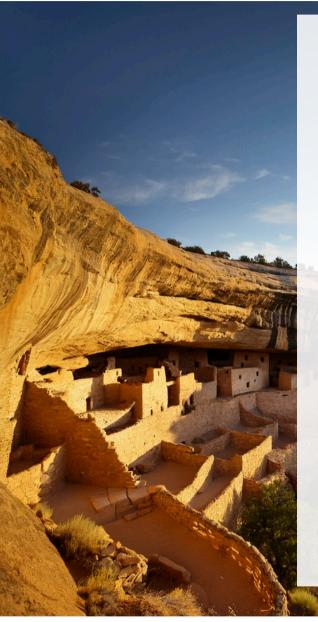


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# Acknowledgements



### Land Acknowledgement:

We respectfully acknowledge that the land known as Arizona is the ancestral home of numerous Indigenous Nations, the original stewards of this land since time immemorial. Among them are the 22 Federally Recognized Tribal Nations and many other Indigenous communities. We recognize their enduring connection to this land, water, and sky and their profound contributions to Arizona's cultural and environmental heritage. We commit to building relationships rooted in mutual respect, collaboration, and accountability with the Indigenous peoples of this region.

## Background and need

Formed in 1966, the Arizona Department of Forestry and Fire Management (DFFM) – formerly known as Arizona State Forestry - manages and reduces wildfire risk to Arizona's people, communities, and wildland areas while providing forest resource stewardship through strategic implementation of forest health policies and cooperative forestry assistance programs. **DFFM's Urban and Community Forestry (UCF) Program is a cooperative forestry program that focuses on the stewardship of urban natural resources. The UCF Program provides technical assistance, education, and other resources – responding to the needs of urban areas by helping communities value, conserve, manage, and enhance community forest ecosystems throughout Arizona.** 

The Arizona UCF program was initiated in 1991 and tasked with providing technical assistance and cost-share grants to Arizona communities. Since 1996, over 3.9 million in cost-share grants and an additional 4.2 million under initiatives from the *Investing in America Initiative* under the Biden Administration have been awarded to communities and organizations for urban forest management activities. In the past 4 years alone, the Arizona UCF Community Challenge Grant program has received more than \$1.3 million in matching partner contributions.

Arizona's UCF program is managed and funded in collaboration with the USDA Forest Service, which stipulates that a programmatic 5-year strategic plan be developed for funding eligibility. Thus, this five-year plan is an important guiding document for the review of program accomplishments and enables Arizona to receive Federal funding for UCF program efforts.

### Urban Forestry Advisory Committee

A 9- to 11-member Urban Forestry Advisory Committee (UFAC) operates as a Designated Committee of the State Forester to support the AZ Forest Action Plan priorities. The UFAC allows DFFM to continue to meet the national requirements of the US Forest Service Urban and Community Forestry Program. The 2025-2029 Strategic Plan was guided by community priorities, developed by UCF program staff, and reviewed and approved by the UFAC. This document will guide Arizona's UCF Program implementation.

# Introduction

The Urban and Community Forestry Program (UCF) sought community input to the 2025-2029 strategic plan as detailed below:

### ACTOR MAPPING

The purpose of the actor mapping session, held with 3 UCF program staff and 7 key partners in November 2023, was to map out the organizations and individuals who influence, and are influenced by, UCF's work to inform a stakeholder engagement plan. Actor mapping can help identify whose perspectives should be considered when making program decisions, including strategic planning. The UCF program team used these results to recruit a new advisory committee, update contact lists, and create a comprehensive survey invitation.

#### **COMMUNITY SURVEY**

The UCF strategic planning team coded national and state forest action plans as well as UCF strategic plans from other western states with similar climates and urban forestry needs for items to be included in the community survey. The survey was open in May 2024 and reached 227 respondents across 11 of Arizona's 15 counties. The survey covered informational needs and preferences, AZDFFM services, youth conservation education, and tree health priority needs.

### **COMMUNITY CONVERSATIONS**

To reach an intersection of the public not reached by the community survey, 6 UCF program staff and advisory board members volunteered to conduct short community conversations with neighbors and passers-by in public places such as libraries and community centers. In June and July 2024, these volunteers conducted 52 community conversations, mostly in the Phoenix metropolitan area.

### URBAN FORESTRY ADVISORY COMMITTEE (UFAC)

The UFAC provided guidance to the strategic planning process and reviewed and approved the 2025-29 plan.

## **Glossary of terms**

#### Agroforestry

The intentional integration of trees and shrubs into crop and animal farming systems to create environmental, economic, and social benefits. Agroforestry has been practiced in the United States and around the world for centuries (USDA).

#### Arizona Magnificent Tree Program

A program managed by UCF that recognizes and documents large and culturally significant trees in Arizona to promote awareness and conservation of notable trees.

#### Arizona Tree Stewards Program

A volunteer-based program that trains community members to become advocates for trees and contribute to their local urban forestry efforts.

#### **<u>Climate and Economic Justice Screening Tool (CEJST)</u></u>**

This tool was developed by the US Council on Environmental Quality to identify communities experiencing environmental burdens in eight categories: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development. The CEJST can be used to improve investment in overburdened and underserved communities.

#### **Community Challenge Grant**

A U.S. Forest Service-sponsored DFFM grant program aimed at funding projects that improve resilience, climate adaptation, and urban forestry within communities.

#### Green infrastructure (or green stormwater infrastructure, GSI)

Systems and practices that use natural processes and materials, such as trees and rain gardens, to manage stormwater and improve environmental quality in urban settings.

### Neighborhood Forests Companion Guide

A DFFM resource designed to integrate urban forestry information into K-12 curricula, helping educators teach students about the benefits and care of urban forests.

#### Planners/ 'all scales of planning'

In this document, 'all scales of planning' refers to municipalities, homeowners associations, non-profit organizations and others who are involved in creating plans for how natural resources in community spaces will be managed into the future.

#### Tree care worker

Tree care workers provide services such as landscape consulting, pruning and fertilizing, transplanting and removal, plant health care, cabling and bracing, and lightning protection. This category includes certified arborists but also landscapers without this certification.

#### Tree City USA, Tree Line USA, and Tree Campus USA Programs

National programs sponsored by the Arbor Day Foundation that promote the importance of trees in cities, along utility lines, and on campuses, respectively, and encouraging their sustainable management.

#### Tree Risk Assessment Qualification (TRAQ)

A credential for individuals assessing tree risks, supporting safe and effective tree management.

### Urban forester

A professional who manages and maintains urban forests to improve city environments and enhance community well-being.

### Urban Tree Threats Response Guide

A resource co-developed by the UCF program that lists potential threats to urban trees along with strategies for mitigation; aimed at supporting the sustainable management of urban forests.

# Mission

The Department of Forestry and Fire Management's Urban and Community Forestry (UCF) Program is a cooperative forestry program that increases awareness, appreciation, and stewardship of urban forests in Arizona. UCF supports municipalities and other organizations with financial and technical assistance to foster collaborative planning and sustainable management of urban forestry, from planting to protection and maintenance.

# Vision

All communities in Arizona, including those with lower historical investment, have healthy and sustainable urban forests that contribute to ecosystem resilience and human wellbeing. Residents of urban areas have an increased awareness of, appreciation for, and commitment to the stewardship of community forests in Arizona.

## Scope

UCF primarily serves as a resource hub for local governments and others doing onthe-ground work related to urban forestry. UCF manages a cost-share grant program; promotes and manages the Arizona Tree City USA, Tree Line USA, and Tree Campus USA programs; and plans and implements Arizona Arbor Day celebrations. Through partnerships with local organizations, UCF develops educational materials and promotes awareness of urban forest stewardship, equity, and benefits; integrates urban forests and best management practices into planning efforts; develops leadership and expertise in the tree care industry; and improves access to healthy urban canopies into the future. To connect with partners and communities, UCF convenes an advisory council, leads outreach and engagement strategies, and participates in working groups and other networking events.

## **Core Values**

Stewardship	Our program promotes sustainable urban forestry practices that respect the land, its ecosystems, and the communities that depend on them, both current and future.
Resilience	We strive to cultivate urban and community forests that are adaptive and resilient, capable of withstanding environmental shocks and stressors.
Collaboration	Our program fosters partnerships with local communities, non-profits, the private sector, and other government agencies to ensure that diverse stakeholders work together to enhance and protect our urban forests.
Community- centricity	Our program is dedicated to centering the needs, voices, and agency of Arizona residents in all aspects of our work.
Environmental justice	We are committed to increasing access to trees and green spaces in historically divested communities. Our goal is to ensure that all communities benefit from the environmental and health advantages of urban forests.

## What is success?

In ten years (2035), the Arizona Urban and Community Forestry Program is the statewide program responsible for connecting urban forestry practitioners to educational resources for best practice, providing funding to support sustainable urban forests, and successfully reaching diverse audiences with its programs, funding, and healthy urban forests.

# Strategic goals 2025-29

- 1. Integrate urban and community forestry into all scales of planning
- 2. Promote the role of urban and community forestry in human health
- ${\bf 3}.$  Cultivate diversity, equity, and leadership in urban and community forestry
- **4**. Strengthen urban and community health and biodiversity for long-term resilience
- Improve urban and community forestry management, maintenance, and stewardship
- 6. Diversify, leverage, and increase funding for urban and community forestry
- 7. Increase public awareness and environmental education

### **Community Challenge Grant Themes**



- **2025** Native trees in education, function, design, and use
- **2026** The role of trees in public health and wellness
- **2027** Smart water management and efficient irrigation practices for trees
- **2028** Youth leadership and participation in urban forestry

**2029** Advancing tree equity and accessibility

# **Strategies and objectives**

# Goal 1: Integrate urban and community forestry into all scales of planning

### 1.1 PROMOTE AND MANAGE TREE CITY USA, TREE LINE USA, AND TREE CAMPUS USA PROGRAMS.

1.1.1 Complete a strategic planning process for the Tree City USA Program and update the programmatic plan, including strategies to promote community participation in areas identified by the Climate and Economic Justice Screening Tool (CEJST).

1.1.2 Implement identified strategies to increase participation, with a goal of at least 5 new municipalities participating (at least one a CEJST-identified community).

1.1.3 Host at least one annual networking opportunity for Tree City Leaders.

1.1.4 With the Arbor Day Foundation, compile examples of guidelines for tree management plans and ordinances as models for municipalities and campuses to implement.



### 1.2 ASSIST COMMUNITIES WITH ESTABLISHING, REVIEWING, AND IMPROVING COMMUNITY FOREST ORDINANCES.

1.2.1 Provide funding to assist 3-5 communities with establishing and improving tree ordinances.

1.2.2 Finalize, publish, and promote a document with examples of ordinances and tree management plans as a resource for communities that are establishing and improving their tree ordinances.

### 1.3 PROVIDE GRANT PROGRAM OPPORTUNITIES TO FACILITATE URBAN FOREST RESOURCE STEWARDSHIP.

1.3.1 Convene quarterly meetings with the UCF Advisory Committee. Establish and maintain cost-share grant themes in alignment with UCF's mission, vision, and core values.

1.3.2 Competitively distribute pass-through funding as is made available from the Forest Service.

1.3.3 Provide funding to assist municipalities, not-for-profits, agencies, and organizations to improve urban canopy and tree health.

1.3.4 Ensure grant application and award requirement language is accessible and understandable to a wide range of applicants and audiences.

1.3.5 Administer grants funded through the Inflation Reduction Act directed at CEJSTidentified communities.

### 1.4 WORK WITH HOMEOWNERS AND NEIGHBORHOOD ASSOCIATIONS TO IMPROVE TREE MANAGEMENT IN NEIGHBORHOODS AND COMMON AREAS.

1.4.1 Identify contacts in HOAs across Arizona to foster relationships.

1.4.2 Fund an Arizona Tree Stewards Program focused on HOAs.

### 1.5 SUPPORT THE INCLUSION OF URBAN FORESTS AND MANAGEMENT PRACTICES IN MULTI-DIMENSIONAL COMPREHENSIVE PLANS (E.G., STORMWATER MANAGEMENT, LAND USE, GREEN STREETS, AND DOWNTOWN REVITALIZATION PLANS).

1.5.1 Identify additional informational needs (e.g., green stormwater infrastructure) and create complementary compendia for the municipal toolkit developed by the Phoenix Metro Urban Forestry Roundtable.

1.5.2 Identify ways to connect with planners such as through joining existing networks or hosting new collaborative meetings.

# Goal 2: Promote the role of urban and community forestry in human health

### 2.1 EXPAND AWARENESS OF UCF AND HOW IT IMPACTS HUMAN HEALTH THROUGH OUTREACH TO NEW AUDIENCES THROUGH PARTNERSHIPS AND MEDIA.

2.1.1 Foster partnerships and collaborate on health-focused campaigns with other government entities, such as Arizona Health Zone and Arizona tribal communities.

2.1.2 Connect healthcare entities to the Arbor Day Foundation through the Arbor Day Foundation Tree Campus Healthcare program.

#### 2.2 WORK WITH SCHOOLS AND SCHOOL DISTRICTS TO GREEN SCHOOL CAMPUSES.

2.2.1 Provide a grant program for green schoolyards to expand children's access to greenspace, improved health and wellness, and increase environmental learning opportunities.

2.2.2 Promote inclusion of maintenance plans and trained maintenance staff for preservation of trees in schoolyards.

### Goal 3: Cultivate diversity, equity, accessibility, and leadership in urban and community forestry

### 3.1 IMPROVE DIVERSITY, EQUITY, INCLUSION, AND ACCESSIBILITY IN UCF OPERATIONS.

3.1.1 Coordinate a diverse advisory committee to define what diversity, equity, inclusion, and accessibility (DEIA) mean to the UCF Program. Consult with the committee on plans and progress towards increasing DEIA in and through the program. Partner with DFFM's DEIA Working Group.

3.1.2 Prioritize communities identified as disadvantaged by the Climate and Economic Justice Screening Tool (CEJST) when allocating funding and planning programming.

3.1.3 Engage youth and older adults in urban forestry by recruiting 3 new Tree Campus K-12 and 2 new Tree Campus Healthcare participants.



ARIZONA URBAN AND COMMUNITY FORESTRY STRATEGIC PLAN 2025-2029

### 3.2 EXPLORE AND EXPAND RELATIONSHIPS ACROSS THE STATE WITH DIVERSE GROUPS TO PROMOTE UCF WIDELY AND INTEGRATE COMMUNITY PERSPECTIVES IN UCF PROGRAMMING.

3.2.1 Convene key stakeholders to complete an actor mapping exercise to explore organizations and communities that should be involved in UCF program planning and decision-making.

3.2.2 Complete a community engagement plan to increase outreach and partnership with identified organizations and communities. Develop relationships with organizations working in divested communities.

3.2.3 Engage tribal communities and refugee groups in partnership, planning, and implementation of urban forestry programs.

#### 3.3 ENGAGE A NEW AND DIVERSE AUDIENCE OF TREE CARE WORKERS.

3.3.1 Provide training, certifications, and materials in Spanish. Identify additional languages to expand outreach to underrepresented audiences and translate materials as necessary.

3.3.2 Provide funding to programs and activities aimed at increasing the number of women in the arboriculture industry.

3.3.3 Provide funding for entry-level employment training programs and activities for youth facing barriers to employment.

# Goal 4: Strengthen urban and community health and biodiversity for long-term resilience

#### 4.1 PROMOTE CLIMATE RESILIENCE IN URBAN FORESTRY.

4.1.1 Fund projects aimed at improving resilience (e.g., increasing the use of climate-resilient tree stock for urban environments) through avenues such as Community Challenge Grant themes.

4.1.2 Promote the prioritization of native trees in grant-funded tree planting projects (e.g., through a stipulation that at least 10% should be native).

4.1.3 Research innovative ideas to increase urban forest resilience in the face of extreme weather events (e.g., community campaigns).



### 4.2 PROMOTE AND PROVIDE RESOURCES (INCLUDING EDUCATION AND FUNDING) FOR AGROFORESTRY/COMMUNITY FOOD FOREST PLANNING AND PLANTING.

4.2.1 Connect with urban agriculture programs and community/school gardens and provide them with information and support to integrate native and food-producing trees in their crop systems.

4.2.2 Partner with the Southwest Agroforestry Action Network (SWAAN, swain-site.org) to further their mission of helping people integrate trees, crops, and animals to regenerate Southwest landscapes.

### Goal 5: Improve urban and community forestry management, maintenance, and stewardship

### 5.1 CREATE, UPDATE, AND WIDELY SHARE RESOURCES RELATED TO URBAN FORESTRY MANAGEMENT AND MAINTENANCE ON THE DFFM UCF WEBSITE.

5.1.1 Host the Urban Tree Threat Response Guide website as a central repository for urban forest threats and corresponding mitigation measures. As funding allows, update the plan routinely (goal: every three years), and promote awareness and use of the plan by decision-makers.

5.1.2 Create informational videos about tree care (e.g., water management, pruning) and the benefits of community forests to be hosted on the website.

5.1.3 Provide up-to-date information about annual workshops and technical assistance opportunities on the website.

### 5.2 INCREASE THE NUMBER OF QUALIFIED TREE CARE AND ARBORICULTURE WORKERS THROUGH EDUCATION.

5.2.1 Create connections with and educational materials for the landscaping and green jobs workforce.

5.2.2 Offer workshops, trainings (including the Tree Risk Assessment Qualification), and technical support to a wide-range of tree care workers and urban forestry professionals.

### 5.3 PROMOTE AND UTILIZE THE TREE STEWARD CURRICULUM TO TRAIN VOLUNTEER STEWARDS ACROSS THE STATE TO SERVE AS WELL-INFORMED COMMUNITY TREE CHAMPIONS

5.3.1 Encourage the use of the curriculum in pass-through grant projects.

5.3.2 Identify potential areas for program expansion, including identifying a host organization able to manage volunteers and track their service.

# Goal 6: Diversify, leverage, and increase funding for urban and community forestry

6.1 MAINTAIN DATA ON GRANTEE PROJECTS AND PARTNERSHIPS TO TRACK AND DEMONSTRATE PROGRAM IMPACT (E.G., TO STRENGTHEN FUNDING REQUESTS).

6.1.1 Create a database of all funded projects to be hosted on the DFFM UCF website.

### 6.2 DIRECT FUNDING TO DIVERSE PROJECTS THAT SUPPORT URBAN FORESTS IN NON-TRADITIONAL WAYS (E.G., RESILIENCE, CLIMATE, HEALTH, FOOD).

6.2.1 Design cost-share grant themes to incorporate interrelated topics.

6.2.2 Guided by the actor mapping results, expand outreach to sectors and organizations that have not previously sought DFFM funding to enrich the variety of submitted project proposals.

#### 6.3 PROVIDE MINI-GRANT OPPORTUNITIES TO SUPPORT SMALLER-SCALE PROJECTS.

6.3.1 Establish a TREE Grant fund to bolster existing incentives for designated Tree Cities, Tree Line utilities, and Tree Campuses and support local initiatives aligned with program goals.

6.3.2 Award TREE Grants to at least 1 grantee per year.



# Goal 7: Increase public awareness and environmental education

# 7.1 COORDINATE THE ARIZONA MAGNIFICENT TREE PROGRAM IN CONJUNCTION WITH THE NATIONAL CHAMPION TREE PROGRAM TO EDUCATE THE PUBLIC ABOUT THE BENEFITS AND IMPORTANCE OF LARGE AND CULTURALLY RELEVANT TREES.

7.1.1 Accept nominations from the public for champion and culturally-significant trees to be recognized. Coordinate the verification of nominated trees and maintain a detailed registry.

7.1.2 Produce an annual report of newly-awarded Magnificent Trees, and share the 'Magnificent 7' at the annual Arbor Day Celebration.

7.1.3 Host two annual workshops to recruit and engage additional volunteer Big Tree Hunters and Verifiers.

7.1.4 Enhance the program's visibility through creative projects, mapping of public trees, and other outputs that support public awareness.

### 7.2 CELEBRATE ARIZONA ARBOR DAY AND ENCOURAGE INVOLVEMENT ACROSS THE STATE.

7.2.1 Host an annual Arizona State Arbor Day event including a tree planting. Communicate ways that municipalities can participate in the event (e.g., the school poster competition, recognition of Tree Cities, etc.).

7.2.2 Consider ways to support municipalities in hosting local Arbor Day events such as by creating a 'toolkit' of event ideas, providing mini-grants, featuring successful celebrations in the newsletter, and/or offering other forms of recognition and incentives.

### 7.3 SUPPORT SCHOOLS IN INTEGRATING URBAN FOREST INFORMATION INTO THE CURRICULUM BY SHARING EXISTING RESOURCES AND MODELS.

7.3.1 Engage in K-12 school outreach across Arizona.

7.3.2 Connect with teachers to help them understand how urban forestry learning can be applied in their classrooms.

7.3.3 Partner with Arizona Association for Environmental Education (AAEE; arizonaee.org) to promote educators becoming trained in curricula such as <u>Project Learning Tree</u> and DFFM's *Neighborhood Forests* companion guide.



## Key takeaways

This section highlights key findings from the community engagement process that were used to inform UCF's goals and strategies.

### ACTOR MAPPING

### SECTORS TO ENGAGE

- Government (including federal, state, local/municipalities, Tribes, elected officials)
- Forestry (including tree care, fire management, invasive plants management)
- Utilities
- Universities/ research & education
- Food systems
- Nonprofits
- Diverse community members/groups
- Businesses
- Health & well-being
- Education & youth
   development

UCF collaborates strongly and effectively with the US Forest Service, municipalities, and nonprofits.

It takes time to build relationships with underserved/ historically divested populations. It was suggested that UCF prioritize:

- being a presence in community spaces
- communicating what the program can offer to communities, and following through on it
- including culturally-relevant education opportunities in multiple languages

Potential cross-sectoral partners may not currently see their connection to UCF, or they may lack specific knowledge and a stewardship mentality.

# Methods: Community survey

### Survey development

The strategic planning team identified and coded national and state forest action plans as well as UCF strategic plans from other western states with similar climates and urban forestry needs to be included in the community survey:

- Ten-Year Urban Forestry Action Plan (2016-26), National Urban and Community Forestry Advisory Council
- Arizona Forest Action Plan (2020), Arizona Department of Forestry and Fire Management
- Colorado Urban & Community Forestry Strategic Planning (2023)
- New Mexico Urban & Community Forestry Strategic Plan- Strategy 7 (date unknown, requested by program administrator)
- CAL FIRE Urban & Community Forestry Program Strategic Plan (2019-2024), California Urban Forest Advisory Committee
- Arizona Department of Forestry and Fire Management's Urban and Community Forestry Strategic Plan (2020-24), the current 5-year strategic plan

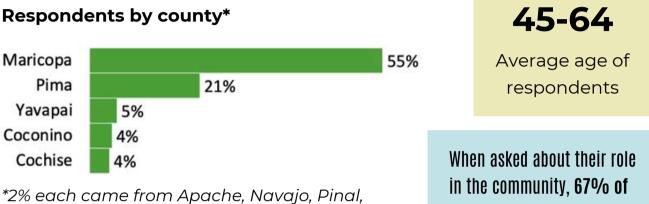
This produced a comprehensive list of 456 items, which were then coded into 22 themes, some of which also included sub-themes. These themes are covered in the *Tree health priorities and needs* section below.

### Distribution

The survey was launched in May 2024 and was open for two weeks (extended to four weeks). The survey was advertised in DFFM's newsletter, and an invitation to participate in the survey was sent to 780 community partners via Constant Contact, which had been updated using the results of the actor mapping session. Partners were encouraged to distribute the survey invitation via their own listservs to initiate snowball sampling.

### Who did we reach?

The community survey collected 227 responses from 11 out of 15 of Arizona's counties. Most respondents were from Maricopa County (55%) and Pima County (24%). Most also indicated that they lived in an urban area (51%) or the suburbs of a city (28%), with fewer living in a small town (11%), rural area (8%), on Tribal lands (1%), or a farm or ranch (<1%).



and Yuma Counties: <1% came from Gila and Santa Cruz Counties.

responses were related to urban forestry.

The survey reached more middle-aged and older adults, with no youth represented. The Hispanic/Latine population was the most significantly under-represented in the survey, making up 13% of respondents compared to 32% of Arizona's population. The sample was also highly-educated, with 41% holding a bachelor's degree and 40% graduate/professional degree. Based on outreach methods that focused on professional partners, the majority of respondents had roles related to urban forestry, landscaping, or natural resources and/or had volunteered in UCF in the previous year.

97% indicated they value trees in their community "a great deal" (82%) or "a lot" (15%)

30% lived in an Arizona Tree City (while 43% weren't sure) Survey respondents were more invested in urban forestry/ natural resources and familiar with UCFrelated programs, indicating that the survey successfully captured the "expert" and "user" perspectives. However the priorities of the wider community, and especially underserved communities, are not well represented.

# **Community Conversations**

To reach an intersection of the public not reached by the community survey, six UCF program staff and advisory board members volunteered to conduct short interviews with passers-by and neighbors in public places (e.g., libraries and community centers). In June and July 2024, these volunteers conducted 52 community conversations.

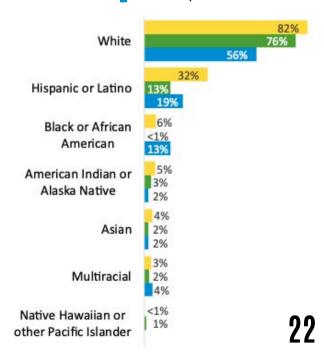
### We asked..

- What do you think are the biggest challenges to having enough, healthy trees in your community?
- What tree-related topics would you like to learn more about, and in what format?
- What do you think are the most important things to do to improve urban forests in your community?
- Where do you currently go to learn about trees?
- Have you ever used DFFM services. If yes, what was your experience like?
- Do you talk with kids about trees or conservation? Which conservation education resources do you use?

### Who did we reach?

Interviewees largely lived in the Phoenix metropolitan area, where the majority of outreach was conducted. Community conversations reached more young adults and one adolescent. Compared with the survey, the conversations reached more individuals identifying as Hispanic/Latino (19%), Black or African American (13%), and multiracial (4%). Many participants were not in the workforce (retired, student, parent, volunteer).

Arizona (2020 Census)
Survey
Community Conversations



### ....at....

Burton Barr Library (central Phoenix)- Scottsdale Civic Center Library- County Meadows Park (Peoria)- El Dorado Park (Scottsdale)- El Dorado Aquatic Center (Scottsdale)- Online- **7** Central Phoenix neighborhood- Veterans Oasis Park (Chandler)- Phoenix Sky Harbor Airport-



Urban and community forestry information and workshops

### COMMUNITY SURVEY

### When asked where they prefer to go for **in-depth information**, participants were most likely to indicate:

However a variety of other formats were also popular

Websites (79%)

Live presentations & workshops (65%)

Talking with an expert (59%)

Research papers and briefs (44%)

Participants were interested in learning more about a range of **urban forestryrelated topics**, including:

- proper maintenance (55%)
- soil types and tolerances (54%)
- birds and wildlife (51%)
- tree canopy inventories (51%)
- right tree right place (48%)
- invasive plant mitigation (44%)
- edible trees and ethnobotany (43%)

Of the participants who indicated they have used a **resource to learn more about trees** (67%), most used the **internet** (71%) or **Arizona Cooperative Extension** (51%).



Particularly, they indicated they would attend DFFM workshops on:

- how to expand urban forests (52%)
- native/ low-water, climate-adapted trees and landscaping (51%)
- tree maintenance (50%)
- tree identification and selection (47%)
- tree care for wildlife (43%)
- pests and disease (41%)
- pruning (41%)
- and more...



Urban and community forestry information and workshops

Younger community conversation participants preferred to get their information from **social media** (20%) and **YouTube/ short informational videos** (18%).

Other participants indicated they like **in-person workshops and events** (14%), **online resources/ website** (11%), and **brochures and one-pagers** (8%). Participants were interested in similar **urban forestry-related topics**:

- Tree care and maintenance, including for specific species, disease prevention, and heartiness (30%)
- Native and climate-resilient species (16%)
- Species identification and phenology (when they fruit and flower) (14%)
- Urban trees as wildlife habitat (7%)
- Right tree, right place (5%)
- Tree hazard liability and insurance (5%)
- Increasing the urban tree canopy (4%)





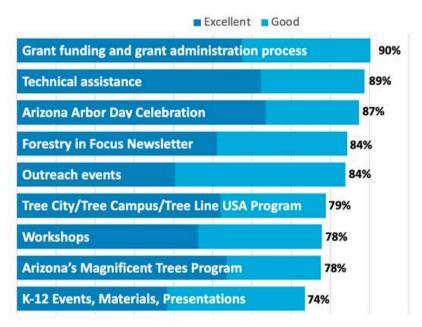
### **COMMUNITY SURVEY**

25

Almost half of survey participants had used at least one AZ DFFM service in the past year.

Between 74% and 90% of participants who had used these services rated them as either excellent or good:

No community conversation participants had knowingly used AZ DFFM services.



Most suggestions for improving services involved expanding services into Tribal and rural areas (as well as other languages), community presence and partnerships, and visibility or services and accomplishments:

66

"Making efforts more visible and making on-the-ground completion of work better known to local public."

"Maybe there should be more information about what the forestry department does and is planning. People in the White Mountains don't seem to know the department exists."

"More presence in northern AZ [...]Perhaps this office can help me out to spread the word regarding tree care industry near the Four Corners and Hopi country." — "Join Agency Council meetings for the Navajo Nation chapters."

"Frequency. If you miss the scheduled opportunity, it may not be available for some time if it is held in person."

"Create a podcast. Translate into different languages."



Conservation Education

62% of survey respondents indicated they talk to kids about trees or conservation (as a conservation educator, teacher, camp counselor, or parent/grandparent/caregiver)

#### Resources on the internet (67%)

Self-created (47%)

Extension/ 4H/ Jr Master Gardener (44%)

Arizona-Sonora Desert Museum (35%)

Local NGO (29%)

AZ Game & Fish (28%)

Neighborhood Forests (22%)

### COMMUNITY SURVEY

Participants preferred conservation education resources formatted as outdoor trips, activities, and plantings (71%) and in-person workshops (66%), followed by presentations and slide decks (49%), handouts (48%), and videos (41%), among others.

Other conservation education ideas included:

"More outdoor/nature educational programming geared toward the 0-3 age range, and additional careerfocused programming for junior high and high school-aged to help them find a potential job path or get them interested in science."

"There could be tree-planting events for kids if there is yet to be one."

"Other topics like map and compass and survival are other classes or venues that get kids out in the woods or wildlands to appreciate nature and learn about plants and animals. Not to mention camping and fishing as fun adventures."

"It would be helpful to get access to or join workshops related to master naturalist, project WET/WILD, Learning Tree etc."

"The public can be tone deaf to conservation messages but I encourage DFFM to work with partners to maintain and increase the messaging and education about the value of conservation education. It's hard work!"



### 46% of conversation participants indicated they talk to children about trees or conservation. Most of these indicated they talk with their own children or family members using their **personal knowledge, experience, or community wisdom**.



Only 4 (7%) had used specific conservation education resources before, including:

- School resources (unnamed)
- McDowell Sonoran Preserve school programs
- 4-H/ Cooperative Extension
- Prager U's short educational videos

Several participants mentioned they were interested in going more in-depth but weren't aware of relevant resources. Overall, community conversation participants showed great appreciation for community trees and for sharing conservation information with children, despite a general lack of expertise.

Sharing this conservationmindedness with the next generation looked like:

- encouraging young ones to explore the natural world and treat it with respect
- teaching about conserving water while brushing teeth and that paper products come from trees
- sharing the names of different tree species
- practicing identifying seeds and pinecones
- harvesting palo verde pods
- watering trees from irrigation buckets
- composting as a family



Tree health and priority needs

Survey participants were presented with two matrices of services related to urban and community forestry. The first matrix included services that are likely to be relevant to general residents, where the second matrix included services more relevant to professionals in natural resources, forestry, and/or tree care industries. For each service, participants answered the following questions:

How important is this service to you? (5- Extremely important, 4- Very important, 3- Somewhat important, 2- A little important, 1- Not at all important, N/A or I don't know what this is)

How satisfied are you with the availability or quality of this service in your community? (5- Very satisfied, 4- Somewhat satisfied, 3- Neutral, 2- Somewhat dissatisfied, 1- Very dissatisfied, N/A or I don't know what this is)

The purpose of asking these two questions was to understand the relative need to improve or dedicate additional resources towards each service, represented by the difference between the mean perceived importance and satisfaction with the service (called the point score). The table below shows the ratings required to indicate the need for improvement:

CANTER ST	Satisfied	Not satisfied
Important	Low need	High need
Not important	Low need	Low need

Point scores were calculated by subtracting the mean satisfaction score from the mean importance score for each service. Scores could range from a possible high of 4 (indicating the most investment needed) to a low of -4 (with all neutral and negative scores indicating no investment is needed). Overall, survey respondents rated the services as important (with mean scores ranging from 3.4 to 4.6) and had lower mean satisfaction (with mean scores ranging from 2.8 to 3.7), meaning that **point scores actually only ranged from 0.1 to 1.8**.

ARIZONA URBAN AND COMMUNITY FORESTRY STRATEGIC PLAN 2025-2029

# IMPORTANCE Satisfaction Point-Score

### Matrix 1: UCF-related professionals

Providing urban forestry resources to decision-makers	4.43	2.99	1.44
Long-range urban forest action plans (5-10+ years)	4.40	3.09	1.30
Partnering with municipalities on climate adaptation planning and the role	4.36	3.09	1.27
Training and support for municipal (city and county) employees on tree care	4.32	3.08	1.24
Urban and Community Forestry grant funding opportunities	4.26	3.70	0.56
The availability of native seed/ sapling stock at nurseries	4.20	2.85	1.35
Workforce development programs for arborists and urban foresters	4.15	3.07	1.08
Conservation education resources for youth and community members (including	4.11	3.25	0.85
Tree inventories and a statewide tree inventory database	3.98	2.97	1.00
Increasing equity, inclusion, and diversity in the urban forestry field	3.91	2.86	1.05
Networking opportunities for those working in arboriculture and urban fores	3.84	3.36	0.48
Tree City/ Tree Campus/ Tree Line USA programs	3.67	3.53	0.14

In these two matrices, the issue or service is in the lefthand column, followed by the mean importance score, mean satisfaction score, and the resulting pointscore for each item. Note that the importance and satisfaction columns are each color coded from the highest mean ratings for the column in green to the lowest mean ratings for the column in red. The point score column ranges from highest need in dark red to lowest need with no coloring.



### Matrix 2: General residents

Promoting native/ drought-tolerant/ climate resilient landscaping	4.57	2.75	1.82
Increasing access to trees and their benefits across communities	4.48	3.07	1.41
Youth conservation education and resources	4.44	3.32	1.12
Increasing overall tree canopy cover	4.42	2.91	1.51
Increasing schoolyard greenspace and tree canopy	4.41	3.06	1.35
Along with tree plantings, promoting water harvesting and green stormwater	4.37	3.38	0.99
Educational materials related to proper tree care	4.14	2.97	1.18
Technical assistance with caring for and maintaining trees (arboriculture)	4.14	3.01	1.13
Programs and information about tree care and tree health	4.12	3.59	0.53
Outreach events highlighting the importance of urban trees	4.00	2.89	1.11
Tree pest and disease management workshops/ education	3.86	3.35	0.50
Urban forestry volunteer opportunities and the Tree Stewards Program	3.78	3.24	0.54
Urban tree wood waste programs and options	3.70	3.27	0.43
Reducing the risk of human, property, and ecological damage from trees (tre	3.49	3.23	0.26
Arizona Arbor Day celebration	3.45	3.37	0.09
Magnificent Tree recognition	3.36	3.08	0.28
Magnificent Tree recognition	3.36	3.08	0.28



#### Tree health and priority needs

Participants shared suggestions for improving urban forests in their communities, including:

- planting more trees (17%), including offering incentives for residents, involving schools and communities in tree planting events, and strategic municipal investment in canopy cover
- promoting native species (16%) through public education about the benefits, outreach to nurseries/retailers to broaden native tree offerings, and providing incentives or rebates
- increasing public awareness and investment in urban forests (15%) through education, outreach, and advocacy
- improving tree maintenance (9%) through homeowner and professional education
- improving irrigation systems and green stormwater infrastructure (7%)
- prioritizing space for trees (7%) through municipal ordinances and investment (6%) in urban forests
- protecting existing forests and restoring soil, polluted areas, and lawns to healthy, native habitat (6%)

"What would really help the whole city would be the construction of check dams in waterways surrounding the city like they did in Nogales. It would be really long-term, but if it got more water into the aquifer and bulked up vegetation it couldn't hurt."

### **COMMUNITY CONVERSATIONS**

When asked about the **main challenges** to having enough, healthy trees in their community, participants' responses were related to:

- water (24%)
- prioritizing development/ loss of habitat and public space (11%)
- climate and heat (10%)
- cost (9%)
- care and maintenance needs (9%)
- planting non-native species/ lack of knowledge about climate-resilient options (6%)
- lack of conservation/ cutting down mature trees (6%)
- tree cover inequity and disparities (4%)
- not enough trees generally (4%)
- lack of value and awareness of the benefits of trees (4%)
- wrong tree/wrong place (4%)
- tree risks to people and property (2%)