Connecting Canopies Equitable Urban Forestry Policy and Program Matrix

Introduction

Trees are one of the most important features shaping the health and beauty of a city. Trees provide shade, mitigate climate change, and improve mental and physical health. However, urban forestry is one of the most highly discretionary infrastructures among local jurisdictions, lacking state or federal intervention. Jurisdictions that devote fewer resources and less capacity to urban forestry practices experience less protection and preservation of urban forest, with degraded and lost canopy especially prevalent in underinvested areas.

In July 2024, Connecting Canopies completed the final Portland-Vancouver Regional Urban Tree Policy and Program Report, providing a snapshot in time of public tree codes and programs at the jurisdictional level throughout the region. Information was also collected during community engagement efforts, such as focus groups, workshops, and canvassing; at Connecting Canopies policy task force meetings; and drawn from the City of Portland's tree planting strategy report[1].

Using all of these sources, we created the Connecting Canopies Equitable Urban Forestry Policy and Program Matrix, a set of recommendations for moving the current state of policy and programs throughout the region in the direction of meeting community needs. The matrix is an action-oriented rubric that meets community forestry equity goals. It is intended for jurisdictional staff as a guidance toward more equitable programming, for elected officials and decisionmakers toward more equitable rulemaking, and for community advocates and practitioners as an advocacy tool.

The matrix summarizes the current state of regional tree policies and programs, identifies needs and gaps, and provides steps for meeting community needs. Below is a graphic summarizing the steps we followed in creating the matrix.

[1]Portland Parks & Recreation, 2018, Growing a more equitable urban forest: Portland's citywide tree planting strategy.

Current state of the region's tree policies and programs

Tree regulations

Current urban forestry policies mostly focus on tree regulations, especially tree removal regulations. However, municipalities throughout the Portland metropolitan area take very different approaches, with the result being inconsistent urban forestry policies and practices across the region. In our research, we found that several municipalities focused on preservation, while others focused on mitigation after tree loss. We found no current, consistent assessment of regulations with a focus beyond tree removal and protection policies.

Regulations of infrastructure maintenance, such as sidewalks, fall under infrastructure policies. Our tree policy and program report assessed the region's current state for tree regulations, along with individual jurisdiction investments in tree programs and staff capacity. However, the report did not evaluate other policies, such as infrastructure and procurement policies, which can pose indirect barriers for community members. Current regulations in most municipalities place the responsibility of infrastructure maintenance on the adjacent property owner.

Urban Forestry Programs

Existing urban forestry programs are concentrated mostly in the local jurisdictions with larger populations, with each having a different level or type of program. Cities with greater investment in urban forestry per capita, such as Portland, enjoy robust urban forestry programming. This enables the city to build out staff capacity and create community stewardship programs, conduct urban forestry inventories and assessment, and foster community education programs focusing on the benefits of trees.

Smaller jurisdictions outside of Portland with less staff capacity tend to focus on a smaller subset of programming. Mid-size cities like Gresham and Beaverton tend to dedicate their urban forestry programming investments to partnering with local community organizations, such as Friends of Trees, for community tree planting efforts. Small cities such as Forest Grove, Troutdale, and Tigard tend to focus on parks and greenspace planting efforts, due to lack of on-staff urban foresters or their own urban forestry departments.

Out of the 42 assessed jurisdictions:

11 cities partner with local organizations on tree planting programs at various scales	**18** cities have an urban forestry commission or board	**13** cities have complete or partial street tree inventories
12 cities have an arborist on staff	**14** cities have a heritage tree program	**17** cities partner with local organizations to promote urban forestry

Inequitable Investments

Separate from various levels of investment in urban forestry programming at the jurisdictional level, investments are not made equally at the neighborhood level. Studies and spatial data analysis[1] have found that, due to historical disinvestment in urban forestry and infrastructure design, there is a drastic discrepancy between wealthier neighborhoods and lower income neighborhoods, often where communities of color reside.

In recent years, some jurisdictional tree planting efforts have focused on tree planting in equity focus areas. In the City of Portland, for example, the Bureau of Environmental Services and Urban Forestry department focused on planting in under-treed neighborhoods that are low income with large communities of color.

Community Perspectives

Residents of the Portland metro region have offered insights on their needs, challenges and barriers regarding the urban forest through numerous engagement efforts. In ongoing targeted community engagement conducted since November 2022 by core Connecting Canopies partners like The Blueprint Foundation, The Intertwine Alliance, The Nature Conservancy in partnership with Black Future Farms, Verde and others, different ethnic community groups have offered perspectives on their needs.

Safety

There is general community sentiment, especially after the 2024 winter ice storm in Portland, that trees can be a safety risk. Tree maintenance can help alleviate the risk of damage from trees or branches falling. Education is needed about tree species selection during planting ("right tree, right place") and how to prune maturing trees as a safety measure. In some

[1] Locke, D. H., Hall, B., Grove, J. M., Pickett, S. T., Ogden, L. A., Aoki, C., Boone, C. G., & O'Neil-Dunne, J. P. (2021). Residential housing segregation and urban tree canopy in 37 US Cities. Npj Urban Sustainability, 1(1), 15.

Ramsey, J. (2019). Tree Canopy Cover and Potential in Portland, OR: A Spatial Analysis of the Urban Forest and Capacity for Growth. Portland State University.

communities, older generations view large trees as a safety risk and believe they should be replaced with new, small trees once they reach mature size.

Tree maintenance

The cost and work required to keep a tree alive and healthy can be out of reach, especially for underserved and low-income communities. For many, having a tree on or adjacent to their home is seen as a burden rather than a benefit. The lack of tree programs and policies to address these perceptions are affecting the quality and quantity of urban tree canopy.

Community groups and individuals have advocated for local jurisdictions to take over the responsibility of tree maintenance from adjacent property owners as a way to remove barriers, especially for underserved communities. While some jurisdictions have recently started to take a more active role in tree maintenance, across the region it remains predominantly the adjacent property owner's responsibility.

Inflexible tree removal policies, especially under extreme climate events, have also become a more common concern among many who live near large trees, as the Portland metro region has experienced more ice storms over the past decade.

Given that maintenance is one of the top barriers to creating and maintaining more tree canopy, we see a clear need for more tree care support systems, an urban forestry resource hub, and easily available tree planting selections that require less maintenance.

Role of government

On top of risk to personal and property safety, large trees also pose risk to infrastructure, such as damage to sidewalks and power lines. Large trees damaging infrastructure remains one of the top concerns for underserved communities. Some community members see the replacement of large trees with small trees, to ensure safety to property and infrastructure, as part of the government's responsibility. Some community members also view street tree maintenance as part of the government's role.

We see a clear need for government agencies to provide more information about the benefits of trees in a city. Common misconceptions or confusion related to street trees include responsibility for maintenance of trees placed in sidewalk furnishing zones,, the benefits of trees in an urban setting, and other street tree conflicts with infrastructure like utility lines.

Sense of community

For many, trees play an important role in creating a sense of community. However, many who live in underserved neighborhoods share a much different view on the role that trees play. Some experience trees as a sign of green gentrification and displacement due. Many focus group participants have shared that with the gradual displacement of their communities, the role of

trees at their homes have changed due to lack of intergenerational knowledge sharing. This, in turn, has led to a lack of community knowledge about the many benefits that trees provide.

We see a need for education in the form of community knowledge sharing and reintroducing trees as important for creating community.

What are the missing links?

Policy gaps

While some jurisdictions are taking on street tree maintenance as a pilot program, maintenance and infrastructure liability remains a barrier in tree and infrastructure codes of all the jurisdictions we assessed. These bureaucratic and policy barriers need to be removed before cities can build staff capacity and programs that assist communities in planting and caring for trees. The discrepancy in community perspective about what the role of government should be and what the jurisdictions are actually responsible for has created unmet needs in our urban forest.

Bureaucratic burdens also pose a barrier to contracting and procurement processes, especially when it comes to contracting with small BIPOC-led organizations and businesses. Cities tend to contract out tree care and tree planting tasks to private arborist businesses. Some jurisdictions, such as the City of Portland, will contract with businesses certified under COBID (Oregon Certification Office for Business Inclusion and Diversity) programs, to meet their DEI goals. But small organizations can lack the resources to become COBID-certified, therefore facing greater barriers to acquiring contracts and partnerships for tree care. This category includes workforce development programs interested in providing job training and/or entry-level work in tree care for street and yard trees.

Program gaps

With policy burdens removed, more supportive programs could be put in place. Current urban forestry programs don't meet community needs of providing clear information about how to navigate through the system when planting or removing trees, or how to navigate between tree codes and other infrastructure codes. While most of the tree and infrastructure codes are similar for street trees and private property trees, there is a lack of education and clarification about that, especially when a city uses opt-out models in tree planting programs. This confusion can lead to complaints over trees being planted without consent, or newly planted trees not being properly taken care of due to confusion over maintenance responsibility.

Navigating the system is difficult for community members not already familiar with urban trees. We see the need for a consistent one-stop shop where individuals can easily access information and resources. This would create better public-private collaboration. A consolidated access point for tree planting and maintenance information–that also encompasses information on

workforce development and intersections with other topics such as transportation and energy infrastructure–will reduce fragmentation across departments, entities and jurisdictions.

Support for yard tree care and maintenance is another factor that deters many from planting trees in their own yard. For those with large, mature or old trees in their yards, taking care of them on their own or hiring arborists to perform maintenance is viewed as a burden and out of reach financially. In many cases, homeowners would rather remove existing medium or large trees as a measure to avoid future costs of large tree maintenance. Renters of single-family homes often believe they do not have the authority or freedom to perform tree maintenance or tree planting on properties they rent. This leads to housing with potential spaces for trees that are left bare, or trees with deteriorating health conditions.

This need for tree care capacity can be met by expanding workforce development programs to facilitate regional public/private tree care services in partnership with local jurisdictions. A clear pathway for employment related to trees, especially for BIPOC communities, not only provides needed urban forestry capacity throughout the region, but also creates opportunities for people in training to bring knowledge and skills back to their communities.

Funding gap

Lastly, all the missing links above require sustainable long term funding. Current funding models, whether federal, state, or local, focus primarily on tree planting efforts, with some emphasis on workforce development programs. Long-term stable funding to fill the void in private property tree care assistance programs, such as financial assistance programs for large tree maintenance, as yet to be created or identified.

The Matrix:
Short- and Long-Term Program and Policy Goals

Many needs and concerns are identified above. Below are some recommendations for how cities can begin methodically building and improving their programs, policies and services over time to meet community needs and to increase healthy urban tree canopy throughout the region. This list is not meant to be exhaustive, rather to provide some thoughts about effective places to begin. Below the list, which summarizes broad types of action, is the matrix of more specific and detailed policy and program strategies. The column on the left identifies programs and policies to consider implementing, organized by area of concern. The column on the right suggests 1-to-3-year actions to strategically move the needle on those programs and policies.

- Jurisdictions create and retain a designated arborist as a permanent staff position.
- Jurisdictions fund and pilot programs that provide direct care for street trees.
- Each city establishes an urban forestry commission.
- Infrastructure and urban forestry codes place no maintenance responsibility on adjacent property owners.

- Jurisdictions develop and maintain public-private partnerships that foster workforce development.
- Cities diversify hiring to ensure staff is able to connect and communicate with diverse cultural groups.
- Programs and resources are distributed equitably and are accessible across different community groups, regardless of language, income or racial backgrounds.
- Cities develop stable funding enabling them to take over tree maintenance costs and activities on private property.
- City transportation, housing and parks departments work collaboratively, with clear communication and coordination around shared goals.
- Regional and local governments build sustainable long-term funding for urban forestry investments.
- Investment decisions prioritize those who are historically marginalized, experience disproportionate environmental burdens, are most susceptible to harm, and have less adaptive capacity. This includes considering underserved neighborhoods, heat islands, and climate frontline communities.

Removing barriers and providing support	
Policy Increase approved tree species selection for cultural groups Remove burden of infrastructure and tree maintenance responsibilities from adjacent property owners Remove barriers in tree removal policy in relation to extreme climate events Put policies in place that address potential for green gentrification and displacement **Program** Municipalities provide tree care and infrastructure assistance mechanisms or maintain responsibility for tree and sidewalk maintenance Municipalities provide tree care assistance programs for private property and large trees Municipalities provide concise and	**1-to-3-year actions** Remove adjacent property owner responsibility for street tree and sidewalk maintenance from local tree and infrastructure codes View cultural relations and DEI skills as an asset in hiring process Create a DEI rubric for prioritizing investments Do away with tree removal and replanting restrictions for fallen trees during extreme climate events Create a tree care assistance program for summer watering and pruning, prioritizing equity neighborhoods with low tree canopy Create a central information and resource hub

concentrated outlets for community members to seek support and resources Hire staff who connect with underserved communities, and make equitable investments in underserved neighborhoods	
Fostering communities	
Program Municipalities partner with local community groups for tree planting and maintenance efforts, including a workforce development component Municipalities foster community-led planning projects Stable funding for community-led, culturally responsive engagement efforts Municipalities establish tree education programs to raise awareness about trees, provided in multiple languages	**1-to-3-year actions** Build community educational programs that facilitate intergenerational knowledge sharing Develop grant money for culturally responsive engagement efforts to be built by community groups. I.e., the community defines how to use the grant
Knowledge sharing	
Policy Establish required reporting on canopy analysis **Program** Regional education and awareness-raising about trees and how to care for trees Regional education and awareness-raising about the differences between street and private property trees. Outreach materials accessible in all needed languages, accessible to various abilities, and offered at outlets used by target community groups Municipalities maintain up-to-date tree inventory and assessment data Enact participatory process in decision-making	**1-to-3-year actions** Establish regional tree policy forums to sync jurisdictional tree policies and practices Establish educational program under parks or urban forestry departments, emphasizing an engagement process with diverse communication strategies Establish an urban forestry communication plan with multiple target audiences and languages

Reducing silos across departments and jurisdictions	
Policy Ensure that local housing, transportation and urban forestry policies do not conflict with one another Strategically place leadership in coalitions and across government levels through partnerships Ensure state-level housing and transportation priorities don't jeopardize local canopy goals **Program** Establish communication and coordination across municipal departments and between cities Join organizations across the region together in a training to standardize practices and understand vocabulary and approaches. This could be a learning cohort.	**1-to-3-year actions** Create self-assessment process/mechanism that examines leadership and staff improvement toward cultural change Track performance across jurisdictions, establish equity goals and metrics Designate staff roles that work across departments/disciplines
Workforce development	
Policy Reduce and ease contracting requirements to allow more partnership contracts with small nonprofits and COBID businesses. Update hiring and procurement policies to allow more investment in alternative or cultural specific workforce development programs **Program** Municipalities invest in early career development programs by contracting with local workforce development programs for tree work Jurisdictions and municipalities co-create and maintain a clearing house for information on what's expected for a project partnership	**1-to-3-year actions** Jurisdictions facilitate regional workforce career pathway programs Create a hiring rubric with a DEIJ lens for internal hiring Work with local workforce development programs to foster programs that train up candidates Work with local workforce development programs to create entry level positions that graduates of workforce programs can apply to

Funding	
Policy Municipalities establish a tracking system for urban forestry funding sources Establish a money collection system through tree codes (on developments) to fund partnerships with organizations like Friends of Trees. I.e, a “tree fund” Establish a fee-in-lieu system that feeds into the tree fund, with a tracking system for where the money goes, and clear definition and hierarchy of who/what gets to use the fund Jurisdictions dedicate funding and capacity for canopy analysis **Program** Municipalities maintain sustainable dedicated funding sources to support tree planting and maintenance programs Track the value of trees When developing community partnerships, dedicate funding for urban forestry staff Use equity data to guide jurisdictional investments and decision making	**1-to-3-year actions** Designate large tree care support program that also raises awareness of “right tree, right place” Local and regional government creates equity spatial data to guide investments and decision making Establish dedicated funding for canopy analysis studies Establish dedicated funding for staff to develop and update tree codes
Advocacy	
Policy Advocate for sustainable regional and state community tree funding models Redefine trees as a capital asset that can be invested in capital projects **Program** Municipalities create funding mechanisms for community groups that mobilize grassroot power and engage as stakeholder groups in decision making	**1-to-3-year actions** Establish tree canopy goals for each city Create a tree planting strategy with inventory of species, considering specific plantable areas/properties