



Tacoma Urban Forestry Program Overview

City of Tacoma | Environmental Services Department

Environmental Services Commission

February 13, 2025



AGENDA



Background

- PS Urban Forests
- Benefits of Trees
- Tree Equity
- State and Local Policy

Urban Forestry Program

- Policy & Planning
- Technical Services
- Tree Healthcare
- Public Incentive Programs
- Stewardship & Engagement

Project Updates

- Tacoma Mall Greening
- Upcoming Projects

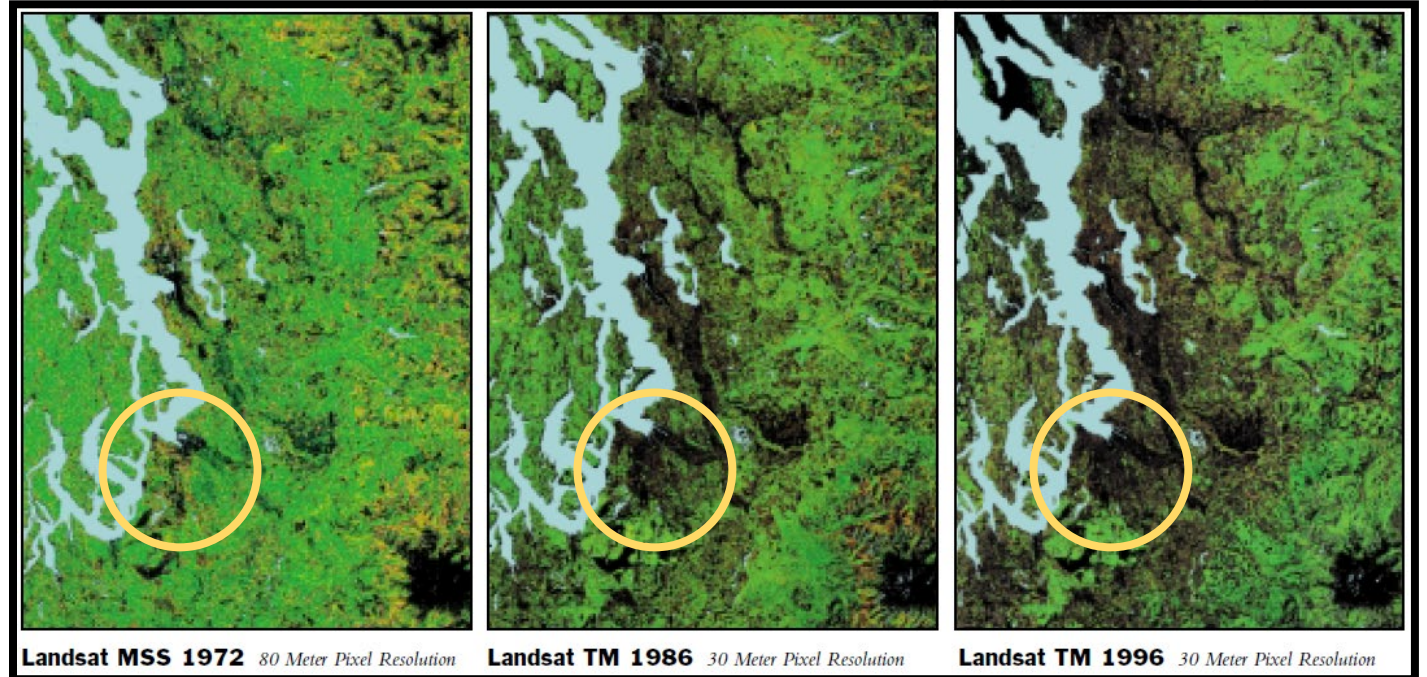


PUGET SOUND URBAN FOREST



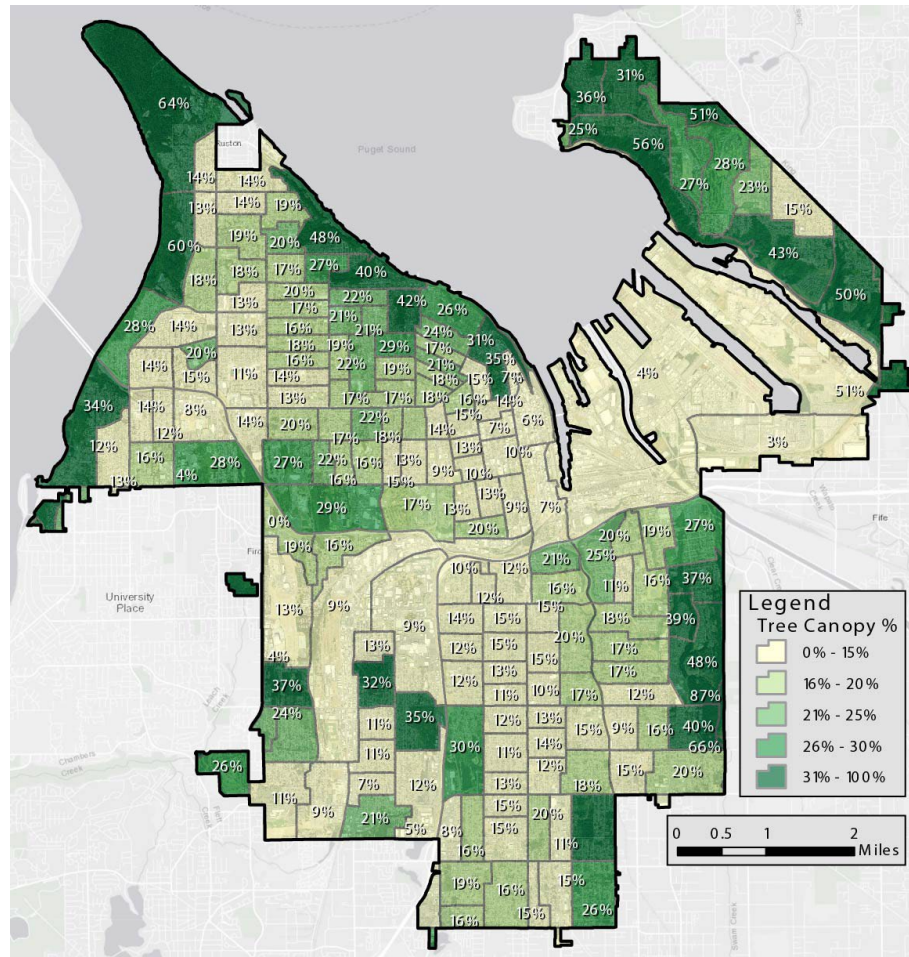
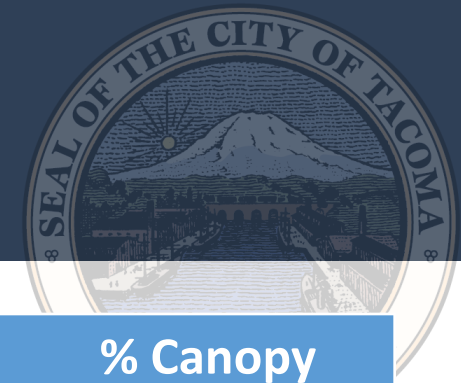
Over a 24-year period (1972-1996):

- High tree canopy areas decreased by 37%
- Stormwater runoff increased by 29%
- Canopy lost would have removed 35 million pounds of pollutants annually



Regional Ecosystem Analysis Puget Sound Metropolitan Area
(American Forests, 1998)

TACOMA TREE CANOPY



2018 canopy cover assessment shows

20% canopy cover

in Tacoma, the **Lowest** assessed canopy in the **Puget Sound Region**

City	% Canopy
Mercer Island	48%
Bothell	45%
Kirkland	41%
Redmond	38%
Bellevue	37%
Shoreline	31%
Renton	29%
Seattle	28%
Tukwila	25%
Puyallup	24%
Tacoma	20%

TREES ARE GOOD



A healthy urban forest:

- Promotes well-being
- Boosts the economy
- Helps children learn
- Improves safety
- Mitigates pollution
- Manages stormwater



Adapted from *Outside Our Doors* (The Nature Conservancy, 2017)

● ● ● COMMUNITY



Stronger, Safer Community

- Crime reduction
- Traffic calming
- Enhancing social ties

Buildings having
more nearby
nature report

48%

Fewer
property crimes
&

56%

Fewer
violent crimes



ECONOMY



Proctor Business District

Shoppers are willing to spend **9-12% more** on goods & services in central business districts with **high-quality canopy**



S. Tacoma Business Dist.



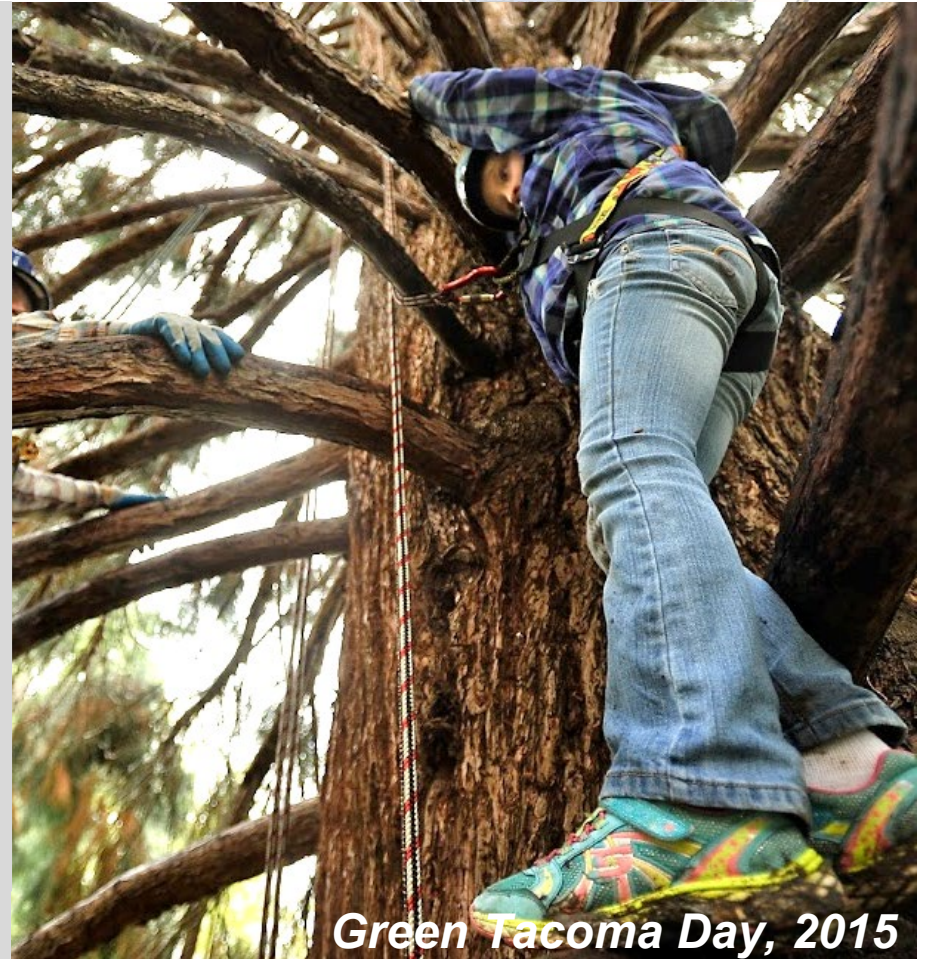
ENVIRONMENTAL HEALTH = HUMAN HEALTH



Disease prevention & health promotion

- Urban heat
- Air & water quality
- Obesity
- Childhood learning
- Mental health

Residents are
3X
more likely
to be physically
active and
40%
less likely
to be
overweight
when living in
areas with
green space





Growth Management Act (RCW 36.70A.020)

Goals to guide the development and adoption of comprehensive plans and development regulations and guide the development of regional policies, plans, and strategies adopted under RCW [36.70A.210](#) and chapter [47.80](#) RCW:

- (9) **Open space and recreation**. Retain open space and green space, enhance recreational opportunities, enhance fish and wildlife habitat, increase access to natural resource lands and water, and develop parks and recreation facilities.
- (10) **Environment**. Protect and enhance the environment and enhance the state's high quality of life, including air and water quality, and the availability of water.
- (14) **Climate change and resiliency**. Ensure that comprehensive plans, development regulations, and regional policies, plans, and strategies adapt to and mitigate the effects of a changing climate; support reductions in greenhouse gas emissions and per capita vehicle miles traveled; prepare for climate impact scenarios; foster resiliency to climate impacts and natural hazards; protect and enhance environmental, economic, and human health and safety; and advance environmental justice.

WASHINGTON STATE POLICY – MUNICIPAL STORMWATER PERMIT



July 1, 2024 – Phase 1 Municipal Stormwater Permit Regulatory Compliance

New Mapping; each Permittee shall:

- Map tree canopy to support stormwater management on Permittee-owned or operated properties. Permittees shall develop and follow a methodology to intentionally identify canopy for stormwater management purposes, which may be updated annually or as needed [December 31, 2026].
- Map overburdened communities in relation to stormwater treatment and flow control BMPs/facilities, outfalls, discharge points, and tree canopy on Permittee-owned or operated properties [December 31, 2028].

Stormwater Planning; each Permittee shall:

- Adopt and implement tree canopy goals and policies to support stormwater management. Permittees shall consider how existing or future tree canopy can support stormwater management and water quality improvements in receiving waters. Establish a long-term (e.g. 5, 10 year or longer) goal of canopy, existing or future projection, to be used for stormwater management that is appropriate to the jurisdiction [December 31, 2028]. Specific considerations related to canopy for stormwater management on Permittee-owned or operated lands shall include (but are not limited to):
 - (a.) Maintaining or increasing canopy in overburdened communities
 - (b.) Maintaining existing mature canopy

POLICY – CITY OF TACOMA



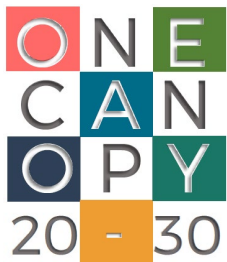
Urban Forest Policy Element (2010); Ordinance No. 27892

- Goal: 30% tree canopy cover by the year 2030
- Designation: trees are a stormwater management BMP



Environmental Action Plan (2016); Resolution No. 39427

- Action: Increase tree canopy, with focus on underserved communities
- Action: Improve regulations for tree protection



Urban Forest Management Plan (2019); Resolution No. 40492

- Strategy: Road map towards goal of a healthy, thriving tree canopy
- Management tool: for municipal tree operations

Climate Action Plan (2021); Resolution No. 40878

- Action: expanded management and care of urban forest

2019






URBAN FOREST MANAGEMENT PLAN



PHASE 1



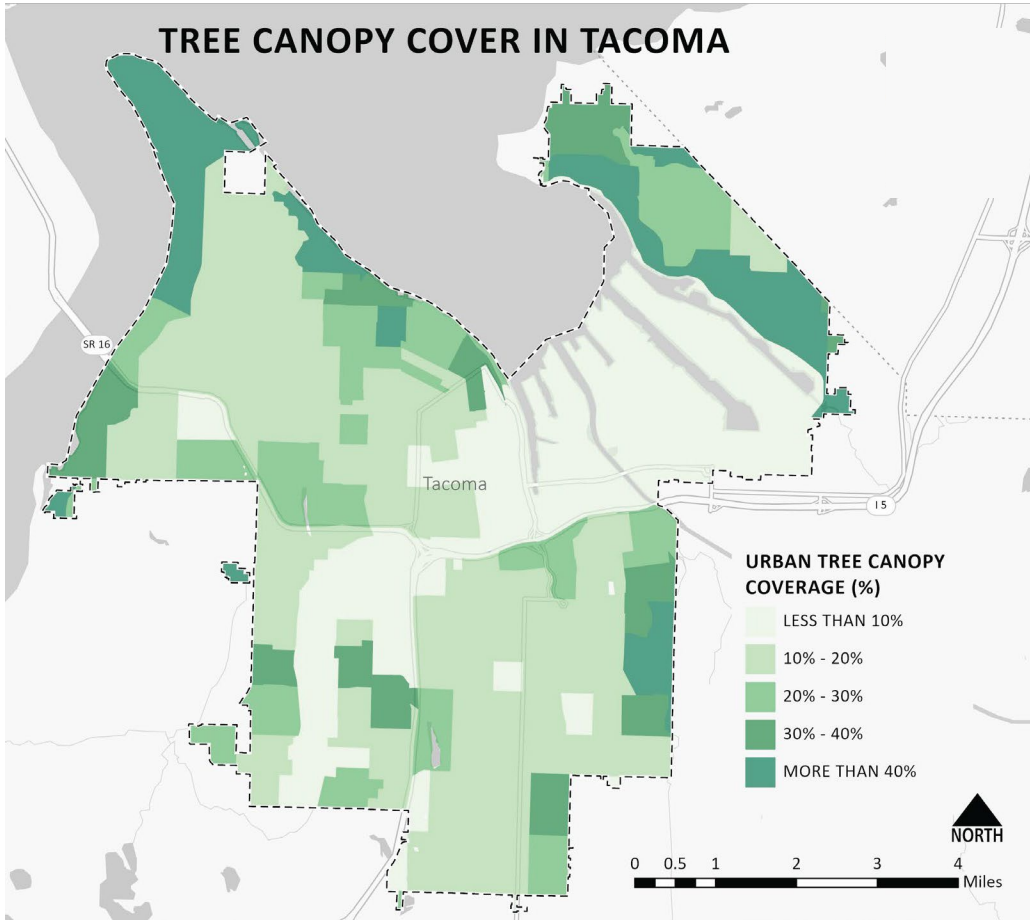
ELEMENTS AUDIT

-  Existing Policies & Plans
-  City Staff Interviews
-  Urban Forest Benchmarks
-  Data Analyses
-  Community Interests & Input

USFS UF Sustainability & Management Audit

		Category Rating
1)	Management Policy	85%
2)	Capacity & Training	81%
3)	Funding & Authority	67%
4)	Inventories & Plans	81%, 79%
5)	Risk & Disaster Planning	50%, 57%
6)	Community Engagement	86%
OVERALL RATING:		77%

2019 UFMP ISSUES IDENTIFIED

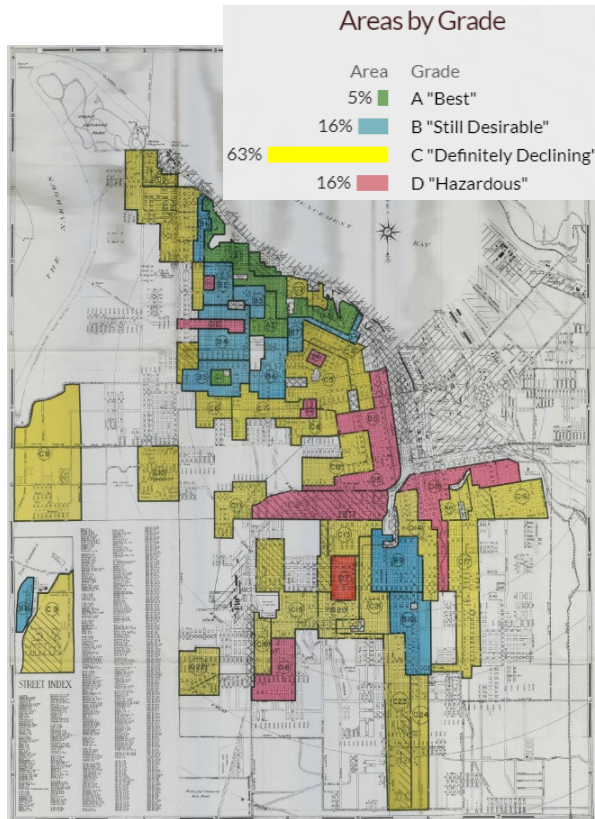


STRATEGIES TARGETS ACTIONS EVALUATION

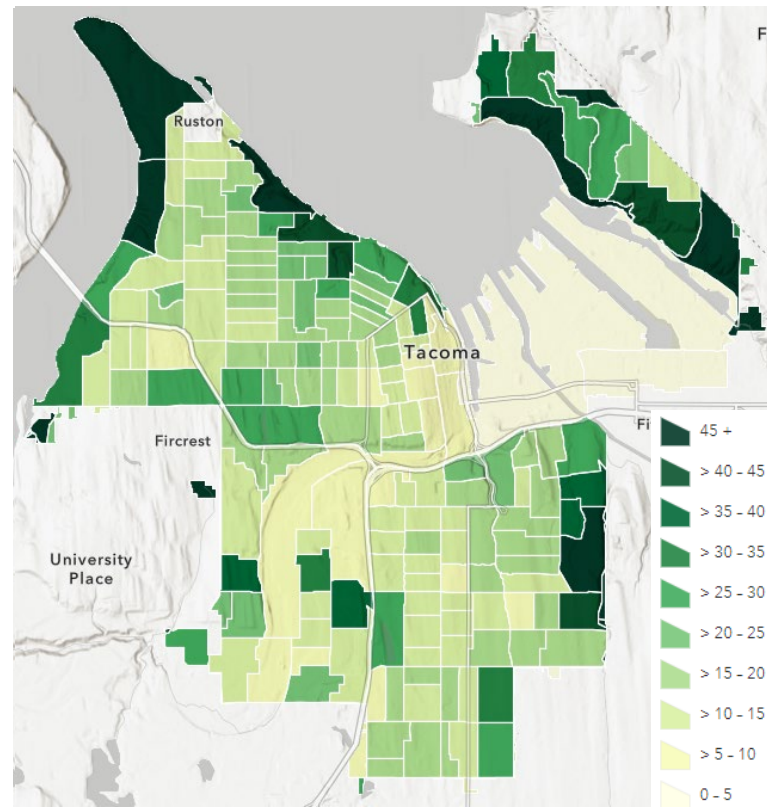
- Outdated tree-related ordinances
- Lack of tree preservation
- No preemptive plan to manage disaster
- Limited capacity & resources
- Inadequate planting & maintenance
- Limited City responsibility, esp. ROW
- Unclear responsibility & workflows for public & private trees
- Environmental equity / justice



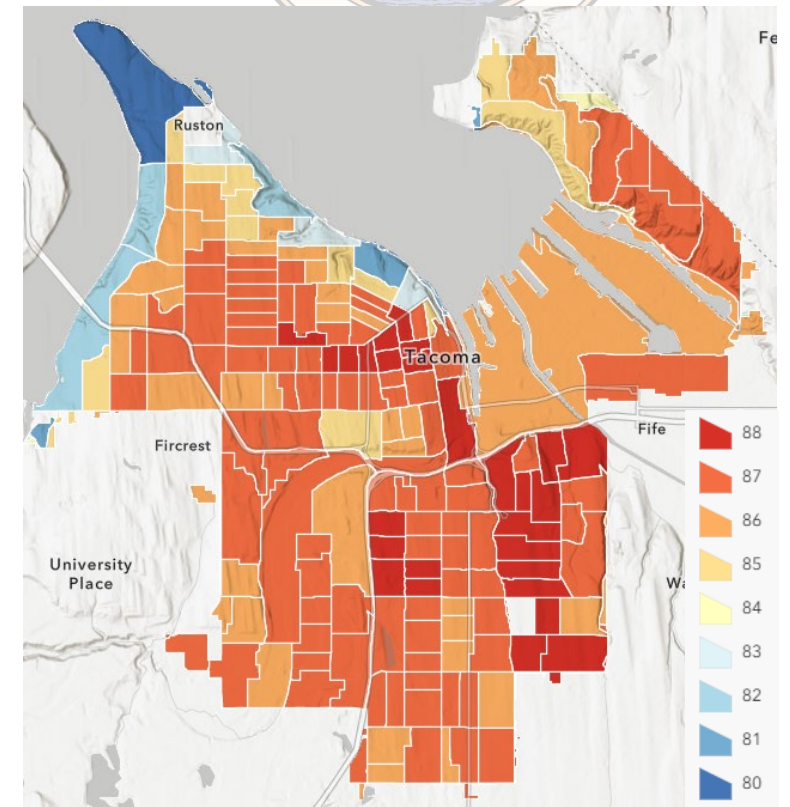
ENVIRONMENTAL INEQUALITY



Redlining in New Deal Tacoma, HOLC (1937)

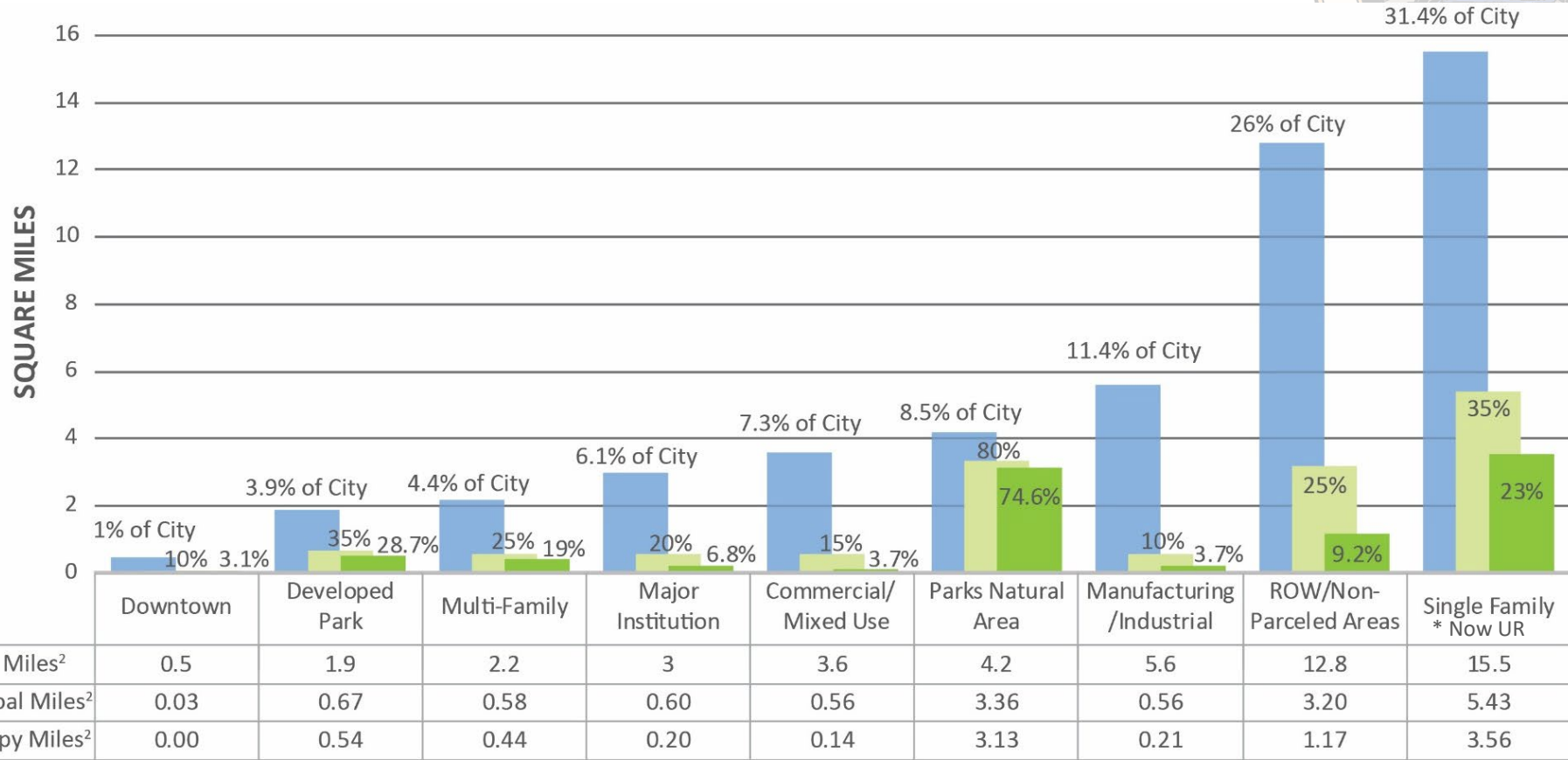
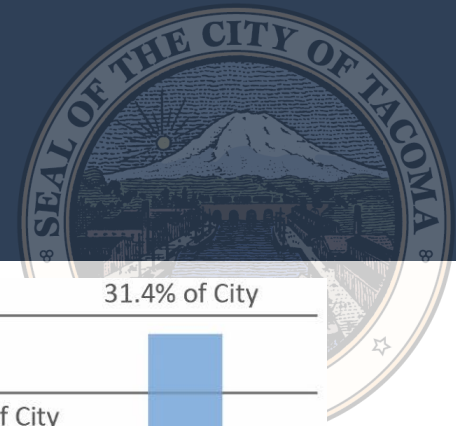


Tree Cover by Census Block (2018)



Urban Heat Study (2018)

2018 TREE CANOPY & LAND USE



LAND USE DESIGNATIONS

■ Land Area ■ Tree Canopy Goal ■ Actual Tree Canopy

● ● ● LEVEL OF SERVICE “DIALS”



Incentivize

Incentivize – What level of assistance does the City provide with resources, materials, financial, and/or technical support?



City Lead

City Responsibility – What services should the City should take the lead on, rather than depending on others?



Regulate

Regulate – How do we set appropriate expectations or requirements to achieve intended outcomes?



Partner

Partner – Should we invest in strategic relationships to leverage resources to make “big impact” projects?

TACOMA URBAN FORESTRY TEAM



Michael Carey
Urban Forest Program Manager



Ryan Hebert
Urban Forestry Analyst



Lisa Kenny
Community Trees Program
Coordinator

TACOMA'S URBAN FORESTRY PROGRAM



A sustainable urban forest is rooted in **effective policy, planning, & technical services**, **proactive tree healthcare** & **stewardship & engagement**.

Our core focus: increase tree canopy for stormwater management, climate resiliency, and improved community health outcomes, with specific emphasis on historically underserved communities.

- Facilitating tree planting and preservation on both municipal and private construction projects
- Providing public incentive programs to support community tree planting and tree healthcare
- Supporting the public with technical assistance, education, and opportunities to engage with the community
- Advising long-range planning, current planning, code, and policy development



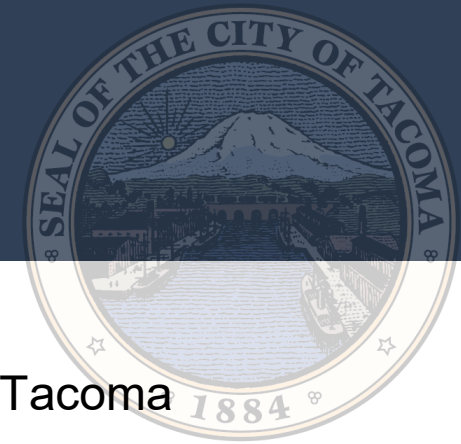
TACOMA'S URBAN FORESTRY SERVICES



- Internal support services to 25 workgroups across 10 City Departments including:
 - Operations, Tree Hazards, & Risk Management
 - Planning & Design
 - Data & Information Technology
 - Outreach, Communication, & Marketing
 - Neighborhood Revitalization
 - City Code, Policies, & Standards
- External support services to community, developers, permittees, contractors, government, and NGOs
- Coordinating planting events with partners
- Informing policy and planning, e.g., Comprehensive Plan, Subarea Plans, and Municipal Code
- Delivering public incentive programs
- Community workshops and volunteer events
- Scientific research informing BMPs
- Local & regional partnerships and committees
- Managing public hazard, liability, nuisance, and risk
- Representing the City in litigation involving trees
- Leveraging grants and alternative funding to maximize community impact



POLICY & PLANNING



Long-Range Planning

- Comprehensive Plan, Home in Tacoma, Tideflats Subarea Plan, & South Tacoma Groundwater Protection District Subarea Plan

Public Tree Ordinance (TMC 9.20 Urban Forestry):

- Updated TMC related to pruning, removal, and planting of “public trees” after 100-years
- Updated permitting process, ROW Design Manual, tip sheets, and technical guidance

Current Planning

- Plan review for complex projects; consult private development on ROW trees
- SME for critical areas permitting and violations

Permit Compliance/Regulatory

- ****Municipal Stormwater Permit compliance****



● ● ● TECHNICAL SERVICES



City Capital Construction

- Provide design services for ES & PW capital construction projects for code compliance
- Tree inspections for construction impacts through staff and on-call contractors

Asset Management

- Manage inventory of public trees; Create maintenance schedules for PW and ES

Legal

- City representative for claims related to trees, including trip and fall lawsuits

Plant Holding Facility (Tree Nursery)

- Provide trees to City projects and programs; allow partners to store trees at our facility
- Co-manage the Washington Conservation Corps crews to support operations at the nursery



● ● ● TREE HEALTHCARE



On-Call Tree Assessment & Tree Work Contracts

- Manage City's on call tree assessments, including hazard trees and construction

Hazardous Tree Assistance Program

- Manage Hazardous Tree Assistance program in support of Code Compliance team

Urban Hardwood Reuse Program

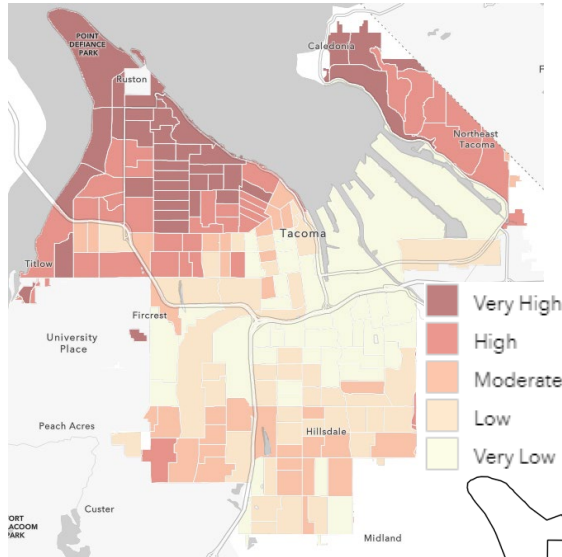
- Coordinate right-of-way tree removals with local urban hardwood reuse company to keep the wood out of the waste stream

Cross-governmental Plant Healthcare Trainings

- Host annual trainings for field staff with City of Tacoma, Metro Parks, Tacoma Public Utilities, Tacoma Public Schools, Tacoma Tree Foundation, Department of Natural Resources, Washington Invasive Species Council, & Department of Agriculture



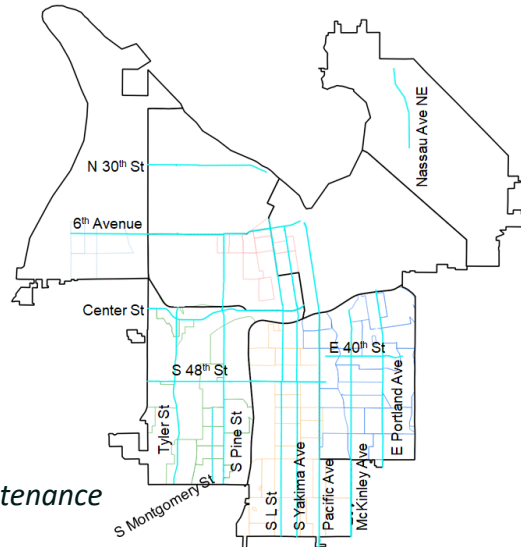
TREE MAINTENANCE PRIORITIZATION



Tacoma Equity Index (2020)

Hazardous Tree Assistance

- Moderate, low, and very low opportunity areas according to the Equity Index
- Individuals who qualify for utility bill assistance based on income
- Trees must be in the public right-of-way



UFMP Priority Maintenance Corridors (2019)

Priority Maintenance Corridors

- Based on Equity Index and canopy data
- Many corridors are main thoroughfares
- Environmental equity/justice



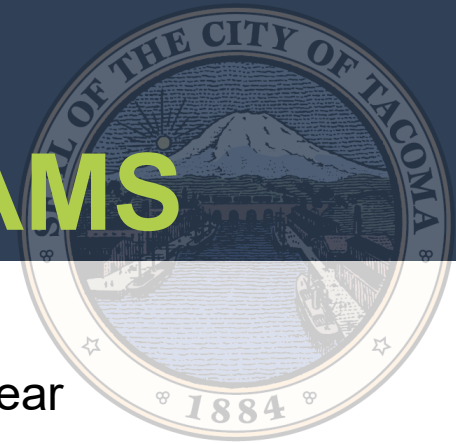
● ● ● HAZARD TREE ASSISTANCE PROGRAM



- Tacoma is working with Cambium Carbon to analyze our urban wood utilization ecosystem
- Study is to strategize a circular economies for wood reuse by diverting landfill waste from urban tree removals
- Goal to create more resilient, transparent, and socially impactful urban wood ecosystems
- Currently working with local urban hardwood reuse company Wane + Flicht to create second life for removed trees



PUBLIC INCENTIVE PROGRAMS



Grit City Trees

- Free street tree program for Tacoma residents; 300-500 street trees per year
- Priority for tree planting is within moderate, low, and very low opportunity neighborhoods

Tree Coupon Program

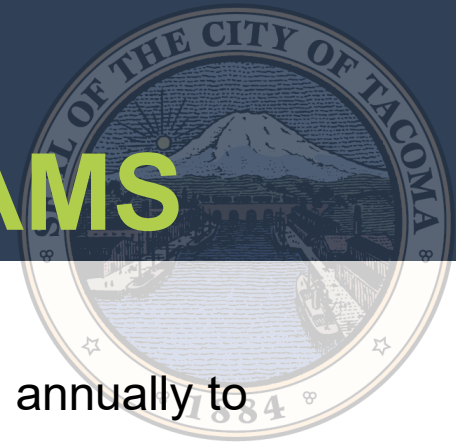
- Subsidized tree program for Pierce County Residents
- Partnership with 8 local nurseries to provide a coupon for \$30 off per tree purchased
- ~2,000 to 3,000 coupons distributed annually; ~1,500 to 2,500 trees planted annually

Branch Out

- Partnership with COT, Tacoma Tree Foundation, Pierce Conservation District, and local CBO within a target neighborhood to distribute between 250-500 trees in a single event



PUBLIC INCENTIVE PROGRAMS



Green Blocks

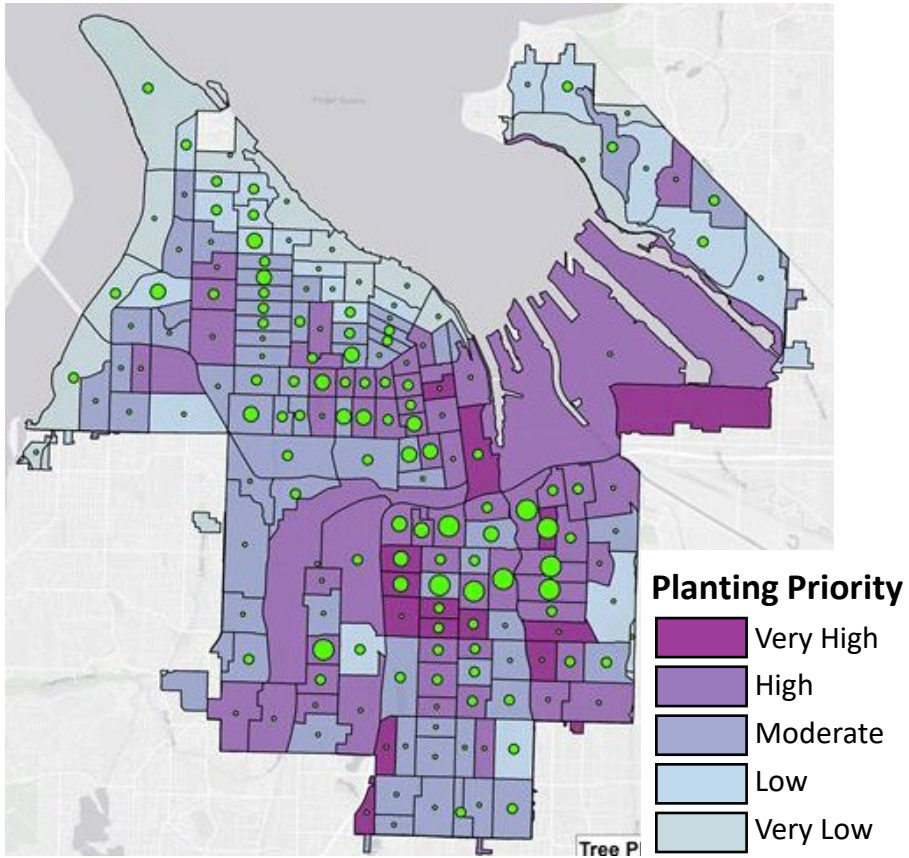
- Partnership with Tacoma Tree Foundation in 1 to 2 priority neighborhoods annually to distribute 250-300 trees per neighborhood
- Services include:
 - Volunteer training, flyering, door knocking, and workshops to assist with tree selection
 - Utility locate assistance & Permit submittals
 - Delivery of trees and materials (TAGRO, stakes, ties, and watering supplies)
 - Community tree planting event to provide planting assistance

DePave

- Partnership with Pierce Conservation District to remove underutilized impermeable surfaces (like paved planting strips) with conversion to sustainable infrastructure like trees, rain gardens, or community gardens.



TREE PLANTING PRIORITIZATION



Number of Trees Planted by Census Tract



Tree Planting Incentive Programs 2020-2024

Prioritization Tool incorporates:

- 2018 Tree Canopy
- 2020 Equity Index
- 2018 Urban Heat Mapping

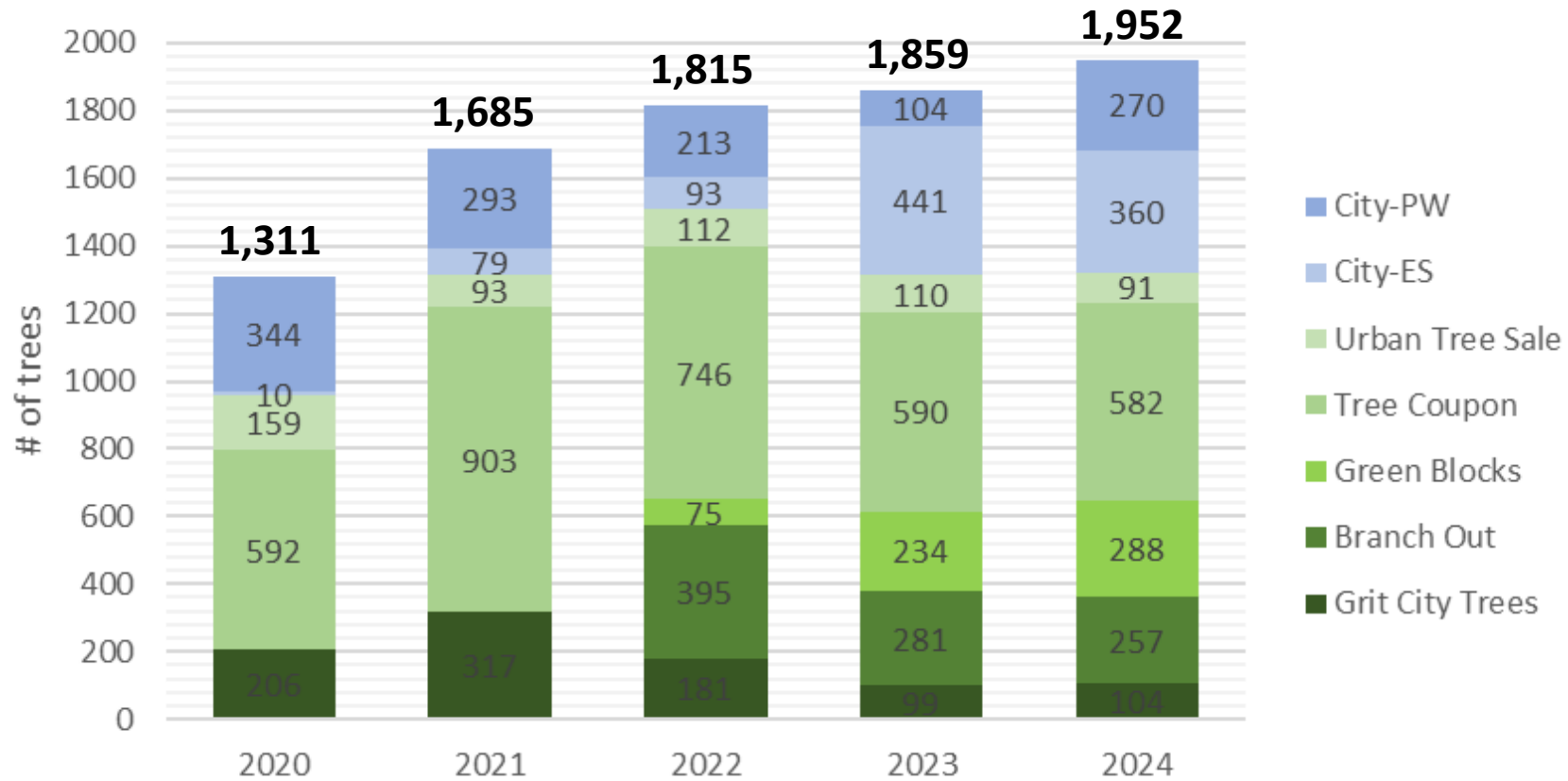
% of trees distributed to priority areas, by program					
	2020	2021	2022	2023	2024
Grit City Trees	90%	88%	93%	93%	87%
Branch Out			92%	87%	97%
Green Blocks			100%	100%	100%
Tree Coupon	79%	79%	72%	80%	77%



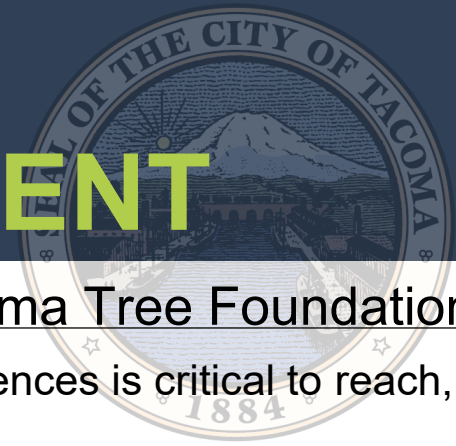
TREE PLANTING METRICS



Tree Planting in Tacoma 2020 - 2024



● ● ● STEWARDSHIP & ENGAGEMENT



Community Tree Program – Urban Forestry in partnership with Tacoma Tree Foundation

- **Community-centered Approach:** authentic relationship building with diverse audiences is critical to reach, involve, and engage underrepresented and overburdened communities.
- **Trainings and Workshops:** expand knowledge and enhance technical skills of individuals involved in community greening efforts such as planning, tree selection, planting, care, and maintenance of Tacoma’s urban forest.
- **“Full Service” Tree Programs:** Green Blocks and Branch Out will be annual programs offered through this partnership.
- **Volunteer Engagement:** a robust number of volunteers and tree stewards are needed to facilitate the preservation, planting, and care of Tacoma’s urban forest.
- **Community Outreach and Feedback:** generating interest in current and new programming along with conducting surveys will allow us to update approach and service delivery to address community feedback.
- **Community Appreciation:** Celebration of our community and taking time to reflect on achievements throughout the year is critical for continued engagement.



REGIONAL PARTNERSHIPS



GSI Workforce Development and Career Pathways Coalition

- Cross-sector and cross-jurisdictional coalition focused on workforce development and employment for GSI in Central Puget Sound
- Focusing on in-the-ground project implementation work/ careers
- Building a cohesive and equitable workforce from training to employment to long-term careers

Wa Department of Natural Resources Tree Equity Collaborative

- First statewide partnership to achieve Tree Equity
- Aims to expand neighborhood tree canopy cover by engaging cities, community organizations and stakeholders to build more rigorous and inclusive urban forestry programs across the state



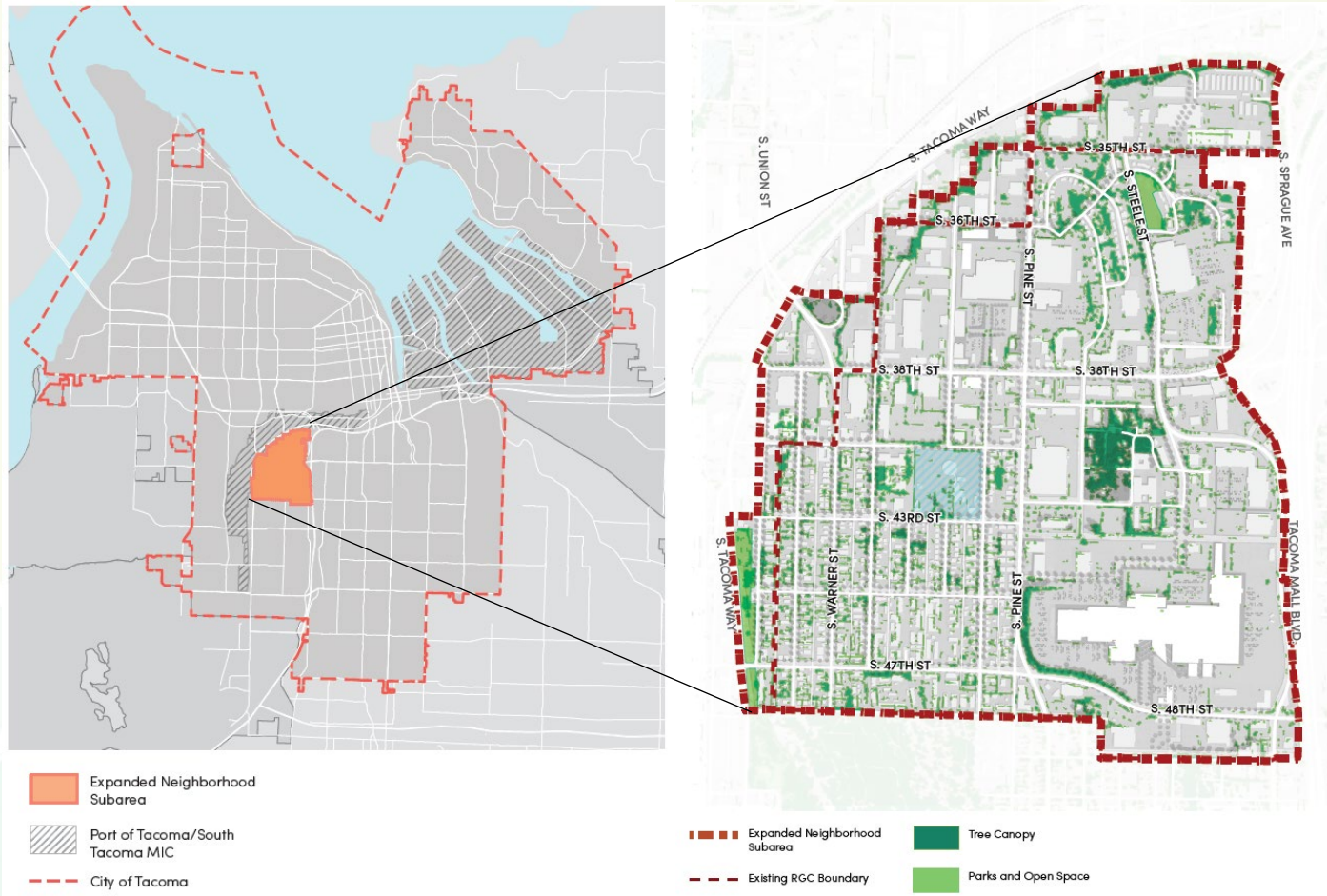
TACMOA MALL GREENING PROJECT

(2018-2023)



Landscape Scale Restoration (LSR) Grant provided by the USDA Forest Service Urban and Community Forestry Program, administered through the WA Department of Natural Resources Urban and Community Forestry Program

TACMOA MALL GREENING PROJECT



Neighborhood at a Glance

- Regional Growth Center
- Population of 4,650 (2018) with 9,749 people working there
- Poverty rate of 31%
- 9.5% tree canopy cover
- 70% impervious surface
- ~1% land area is “open space”
- 9 year lower than county average life expectancy
- Expected to grow by 3x the residents and 2x the jobs by 2040

TACOMA MALL GREENING PROJECT FINAL REPORT

APRIL 2023

FUNDS FOR THIS PROJECT WERE PROVIDED BY THE USDA FOREST SERVICE URBAN AND COMMUNITY FORESTRY PROGRAM, ADMINISTERED THROUGH THE STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES URBAN AND COMMUNITY FORESTRY PROGRAM.

Stakeholder Working Group

City of Tacoma

Mike Carey, Urban Forest Program Manager
Ryan Hebert, Urban Forestry Analyst
Lisa Kenny, Community Trees Program Manager
Rebecca Solverson, Public Art Specialist

Tacoma Tree Foundation

Lowell Wyse, Executive Director
Courtney Johnson, Planting Coordinator
Luna Azzouni, Digital Communications Specialist
Alejandro Fernandez, Community Partnerships Coord.
Jessi Pickel, Project Specialist
Sarah Low, Founder

The Nature Conservancy

Hannah Kett, Urban Program Director
Ailene Ettinger, Quantitative Ecologist
Maia Murphy-Williams, Applied Conservation Ecologist
Phillip Levin, Lead Scientist

Pierce Conservation District

Robb Krehbiel, Green Stormwater Program Manager

University of Washington

Greg Bratman, Dir. Environment & Wellbeing Lab
Olivia Hill, Post Doctoral Research Fellow

Tacoma Pierce County Health Department

Greg Tanbara, Health Promotion Coordinator

Community Advisory Committee

Beverly Bowen-Bennett
Kevin Le
Ileana Areiza
Vivian deZwager
Alejandro Fernandez
Chelsea Vetter
Alejandra Villeda
Renee Meschi
Erica Chang
Kerry Niesen

Artists

Teruko Nimura
Alex Schelhammer

Tacoma Mall

Ashley Wilber, Dir. Marketing & Business Development
Christian Faltenberger, General Manager
Alex Alcalá, Marketing Coordinator

Tacoma Public Schools

Chelsea McElroy, Board Member
Tom Chalk, Director of Facilities
Michelle Rahl-Lewis, Director of Early Learning
Karen Thompson, Admin Secretary, Head Start

Tacoma Mall Project Timeline

Tree Distribution Events

- A - Pierce County Aids Foundation
- B - REI
- C - Marlene's Market
- D - Asia-Pacific Cultural Center
- E - Madison Wishing Tree Event
- F - Griot's Garage Halloween Tree Giveaway
- G - A Greener Tomorrow Starts Today
- H - Tacoma Mall Pop-Up Forest

Engagement & Shared Learning

- I - Griot's Garage EV Truck Pop-Up Forest
- J - Tacoma Mall Pop-Up Forest
- K - Madison Wishing Tree event
- L - Tree Warming (Edison City Alehouse)
- M - GRIT Temperature Blitz (South Park)

Tree Planting Events

- N - Madison Wishing Tree event
- O - Madison School Tree Planting
- P - Tacoma Police Headquarters

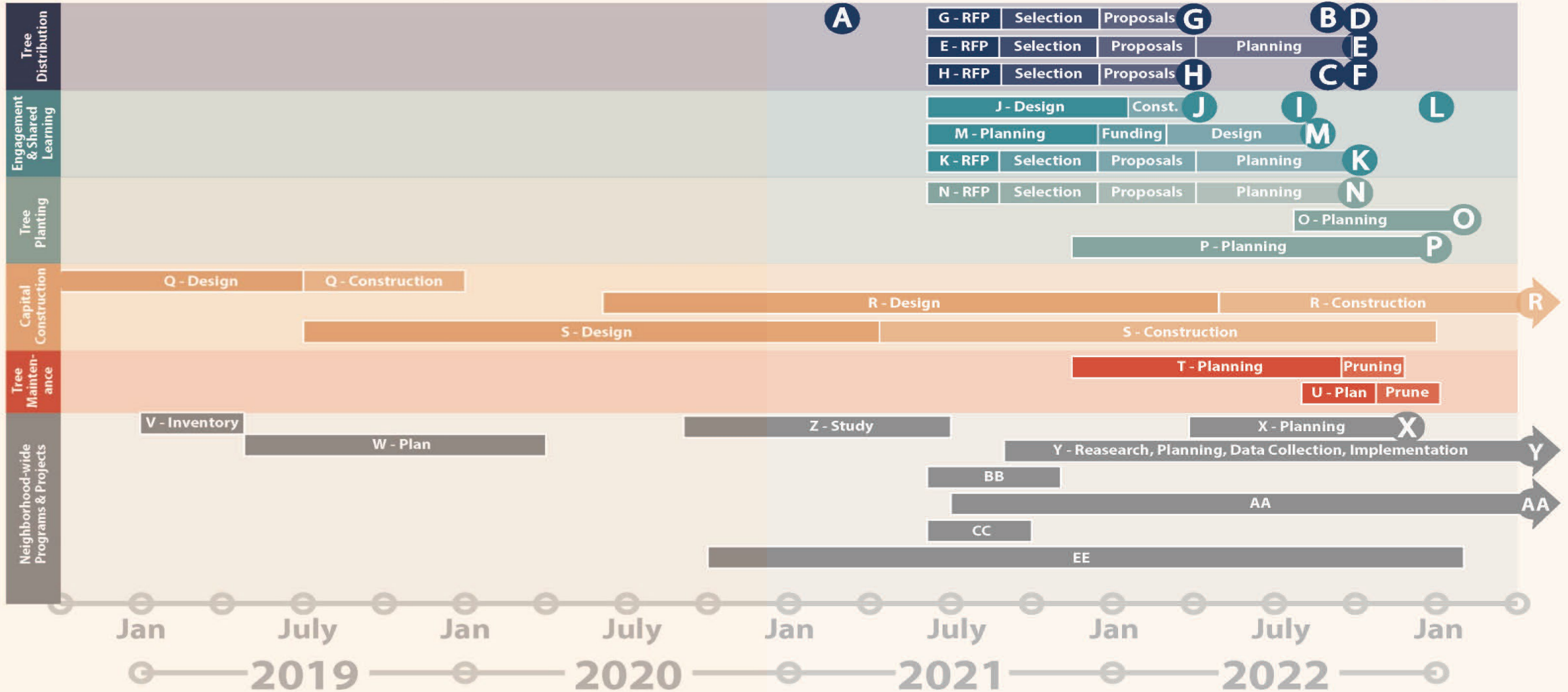
Capital Construction Projects

- Q - Puget Sound Avenue Greenscape
- R - Madison District Green Infrastructure
- S - South 56th Street

Tree Maintenance Projects

- T - Tacoma Police Headquarters
- U - Priority maintenance Corridors; S Fife St (S 48th to S 56th) S Prospect St (S 49th St to S 56th St) S Puget Sound Ave (S 50th to S 54th)

- ## Neighborhood - Wide Projects
- V - Plan-It Geo Neighborhood-wide Tree Inventory
 - W - Plan-It Geo Strategic Urban Forest Action Plan
 - X - Green Blocks
 - Y - GRIT
 - Z - Stormwater Feasibility Study
 - AA - Community Advisory Group
 - BB - Commercial Property Outreach
 - CC - Multi-family Property Outreach
 - DD - Single-family Residential Outreach
 - EE - Landscape Contractor and Property Manager Outreach



NEIGHBORHOOD ENGAGEMENT STRATEGY

Stakeholder Workgroup

Community Advisory Group

Design Charrettes

Commercial Property

Landscape & Property Managers

Public Property

Multi-family

Single-family

Events

Tree Shares

Public Art

Pop-up Forest



Longtime resident and Community Advisory Group Member, Beverly

GREEN INFRASTRUCTURE ENGAGEMENT THROUGH PUBLIC ART

- Two local artists were hired to engage community in “greening” the Tacoma Mall neighborhood
- “A Greener Tomorrow Starts Today” by Alex Schelhammer
- “Madison Wishing Tree” by Teruko Nimura



Free plant recipient at one of artist Alex S.'s pop-up plant giveaways (Apr 2022)



Madison Wishing Tree event attendee next to the Wishing Tree (Oct 2022)

MADISON SCHOOL TREE PLANING

- Over 100 volunteers
- 58 trees planted on a school campus (one of the only public green spaces in the area) that previously had 4.5% canopy coverage
- Result of nearly 3 years of relationship building between project partners and the school district



Madison School Tree Planting (Feb 2023)

Left: State and local officials after planting the “moon tree”

Center: Volunteer helping to plant several of 58 new trees

Right: Pine row planted on perimeter of school field

GREENING RESEARCH IN TACOMA (GRIT)

- Scientists and researchers from The Nature Conservancy and the University of Washington, working alongside Tacoma Tree Foundation & Tacoma Urban Forestry
- GRIT aims to understand information gaps in human well-being benefits of urban green infrastructure
- Study of integrated socio-environmental effects of urban tree plantings and green street installation
- Focus on quantifying benefits of greening efforts, including temperature reduction and psychological well-being, shift over time and in response to tree characteristics.

TacomaTreeFoundation.org/GRIT

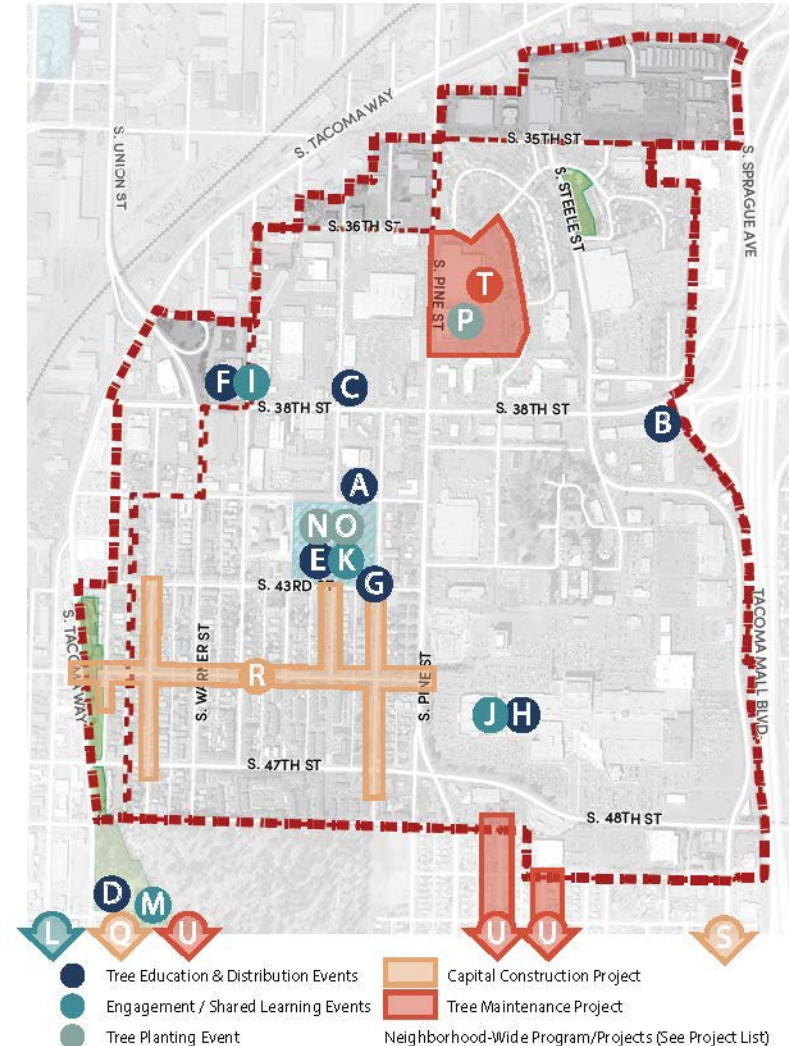


TACOMA MALL GREENING

Project Summary:

- 4 years of community engagement
- 16 projects
- 13 events
- 372 community trees planted
- 592 trees distributed
- 318 community trees pruned
- 300 capital construction trees planted

Cityoftacoma.org/UrbanForestry
TacomaTreeFoundation.org/GRIT



● ● ● UPCOMING 2025/26 PROJECTS



Urban Wood Utilization Study

- Design wood waste diversion program for highest and best use

Trees and Construction Operations Plan

- Address conflict between existing mature trees during public and private right-of-way construction projects, prioritizing tree retention to the extent feasible

Arborist Crew

- Maintenance on City responsible trees, including City-owned parcels and portions of ROW where the City has maintenance responsibility

Construction Arborist

- Provide direction on design and protection of trees on Capital Construction

SafeTREE Routes to School Grant

- Tree planting along 5 school walking corridors servicing 6 schools, and education through urban forestry school curriculum



Tacoma Urban Forestry Program Overview

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Environmental Services Commission

February 13, 2025

