Urban Forest Management Plan - Phase 1 Presentation

City of Tacoma | Environmental Services Department

Infrastructure Planning and Sustainability
October 16, 2019
ITEM 1

AGENDA & OVERVIEW

1. Phase 1 Overview
2. Phase 1 Research Summary
3. Conclusions/Recommendations
4. Next Steps
5. Questions/Comments

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Phase 1 Research Overview

PURPOSE PROCESS RESULTS CONCLUSION

1) **Existing Policies and Plans:** UFSMA, Meetings, Interviews

2) **City Staff Interviews:** Departments and Work Groups

3) **Urban Forest Benchmarks:** UFSMA, Municipal Budgets, City Records, TMC

4) **High-Level and In-Depth Data Analysis:** Canopy, UHI, Equity, Open Space, Inventory

5) **Community Interests and Input: Surveys,** Meetings, Website

6) **Urban Forest Sustainability and Management Audit:** All Elements

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Planning Element #1

Existing Policies and Plans

To gauge the City's commitment/readiness for urban forest sustainability

Review of 150+ Documents & Resources

USFS Urban Forest Sustainability & Management Audit's Discovery Matrix. City resource sharing

Urban Forest Policy Element

Urban Forest Manual	Urban Forest Mgmt. Plan	One Tacoma
Row Design Manual	Data/ Studies	Tacoma 2025

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Planning Element #2

City Staff Interviews

To understand existing infrastructure & processes around tree management; to further define areas of further investigation.

25 Work Groups representing 10 Departments/Offices:

1) Operations, Tree Hazards, & Risk Management
2) Planning & Design
3) Data & Information Technology
4) Outreach, Communication, & Marketing
5) Neighborhood Revitalization
6) Code, Policies, & Standards

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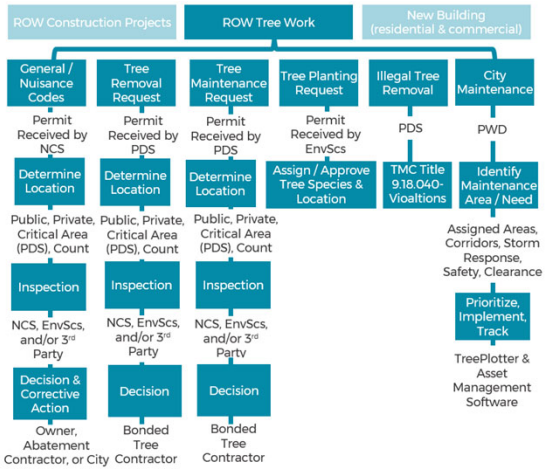
Planning Element #2

City Staff Interviews



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Planning Element #3

Urban Forest Benchmarks

To understand the level of effort & capacity needs to satisfy the City's adopted goals while ensuring future urban forest sustainability

Benchmarking research:

1) Tree City USA database (2018)
2) Municipal Tree Care & Mgmt. Study (*Hauer, et al.* 2014)
3) City maintenance & budget records (2011 – 2018)
4) Tacoma Municipal Code (2019)
   a. One Tacoma Alignment
   b. Landmark Tree Programs
   c. ROW Maintenance
   d. Citywide Canopy Goals

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Planning Element #3

Urban Forest Benchmarks

Program & Budget

Rank	City	2018 Population	2018 U&CF Total Budget	2018 Per Capita	City Maintain ROW Trees?
1	Bellevue	139,014	$7,287,080	$52.42	Yes
2	Longview	36,740	$858,720	$23.37	No
3	Olympia	49,928	$914,740	$18.32	Yes
4	Kirkland	86,772	$1,568,690	$18.08	No
5	Renton	99,692	$1,771,581	$17.77	No
6	Seattle	724,764	$10,168,821	$14.03	Select Areas
7	Redmond	60,712	$679,079	$11.19	No
8	Vancouver	171,393	$1,524,385	$8.89	Select Areas
9	Bellingham	85,388	$672,118	$7.87	No
10	Tacoma	207,280	$1,609,909	$7.77	No
11	Spokane	212,982	$894,620	$4.20	Select Areas

Source: *Arbor Day Foundation's Tree City USA records (2018)*

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Planning Element #4

High-Level & In-Depth Data Analysis

To Identify gaps in resourcing & coverage across the City; to identify urban forest readiness, health, & resilience

Summary	Datasets Used
Tree Distribution & Height	2018 TCA, 2011 TCA, Passive Open Space Plan
Tree Diversity & Composition	Tree inventories
Distribution of Diameter Size Classes	Tree inventories
Tree Condition	Tree inventories
Tree Observations & Defects	Tree inventories
Tree Maintenance Needs	Tree inventories
Cost-Benefit Analysis	Tree inventories
Urban Heat Islands	2019 Urban Heat Study, 2018 TCA
Environmental Justice	2011 TCA, 2018 TCA, Census Bureau
Tacoma Equity Index	Equity Index including 2011 TCA

Planning Element #4

High-Level & In-Depth Data Analysis

Tree Defects

- ✓ 5,161 (60%) of recorded defects could potentially have been avoided.
- ✓ These include utility damage, hardscape damage, girdling roots, topped, branch architecture, and trunk wounds.

Tree Work

- ✓ Most trees require pruning for clearance (57%) or a routine pruning (11%).
- ✓ A complete inventory will provide a comprehensive understanding of the maintenance needs.

(Based on available data, not all public trees represented)

Planning Element #5

Community Interests & Input

To understand what the interests of the community are, and how they can help to craft the level of service.

Information collected from:

1) Community Surveys (1,495 respondents)
2) Public Meetings
3) 311 Service Requests & Urban Forestry Call Logs
4) Commission, Committee, & Organizational Meetings
5) Project Website

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Planning Element #5

Community Interests & Input

Community Survey

Survey Comments & Concerns Aligned with One Tacoma

Components of Urban Forestry in One Tacoma	Count & % Referenced in Q15	
Resource Management – Street Trees	99	(30%)
Canopy Growth 30/30	67	(20%)
Education, Outreach, Collaboration	56	(17%)
Preserve Existing Trees	26	(8%)
Planning the Urban Forest	21	(6%)
Urban Forest Equity & Accessibility	18	(5%)
Resource Management: UF Resiliency & Risk Management	17	(5%)
Climate – Risk Mitigation	12	(4%)
Resource Management: Environmental & Watershed	8	(2%)
Resource Management: Viewsheds	6	(2%)
Urban Forest Long-term Funding	2	(0.6%)
Heritage Trees	2	(0.6%)
Total	**334**	**100%**

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Planning Element #5

Community Interests & Input
Community Meeting

- ✓ September 18th
- ✓ Washington Elementary School
- ✓ 18 attendees
- ✓ Visioning exercise

What do you want the urban forest to look like 10 years from now? For future generations?

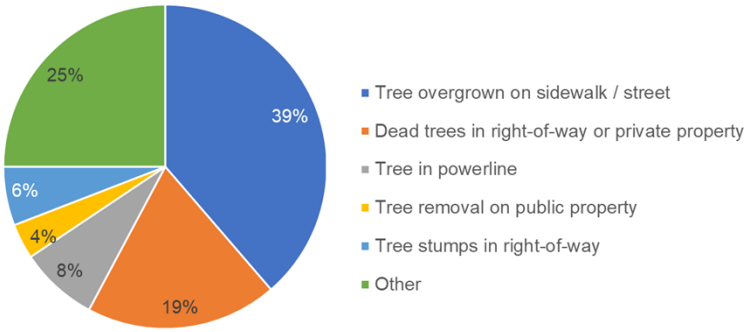
What would 30% tree cover look and feel like and what would it take to achieve this?

If you could change Tacoma's environment in one way, what would it be? How would the City's urban forest be different than it is now?

Planning Element #5

Community Interests & Input
Service Requests & Call Log

- ✓ Tree clearance issues are the primary concern in the ROW (39%).
- ✓ Dead trees or removal requests are the secondary concern in the ROW (23%).



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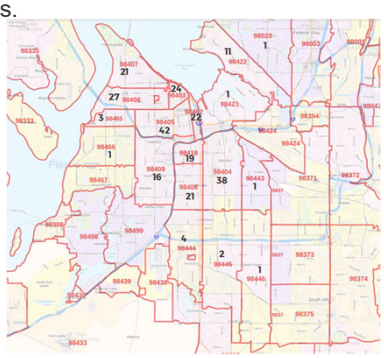
Planning Element #5

Community Interests & Input
Service Requests & Call Log

- ✓ 256 tree-related service requests in ~2.5 years.
- ✓ Central Tacoma had the highest count (42).
- ✓ Primary concern is tree limb clearance.
- ✓ Map summary: Dec '15 – Apr '18 →

Zip Code	Count
98405	42
98404	38
98406	27
98403	24
98402	22
98407	21
98408	21
98418	19
98409	16

Zip Code	Count
98422	11
98444	4
98465	3
98445	2
98023	1
98421	1
98443	1
98446	1
98466	1



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Planning Element #6

Urban Forest Sustainability & Management Audit (UFSMA)

To identify strengths and gaps relating to sustainable urban forest management

All data from Elements 1-5 synthesized into UFSMA:

1) Mgmt. Policy & Ordinances
2) Professional Capacity & Training
3) Funding & Accounting
4) Decision & Mgmt. Authority
5) Inventories
6) Urban Forest Management Plans
7) Risk Management
8) Disaster Planning
9) Policies, Standards, & BMPs
10) Community
11) Green Asset Evaluation

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Planning Element #6

Urban Forest Sustainability & Management Audit (UFSMA)

Category	Description	SOC (% Achieved)	Base (% Achieved)	Overall Rating	Overall (% Achieved)
1	Management Policy and Ordinances	75%	83%	24	**86%**
2	Professional Capacity and Training	100%	NA	11	**69%**
3	Funding and Accounting	75%	NA	8	**67%**
4	Decision and Management Authority	100%	100%	7	**88%**
5	Inventories	NA	75%	21	**81%**
6	Urban Forest Management Plans	NA	67%	19	**79%**
7	Risk Management	58%	50%	9	**50%**
8	Disaster Planning	NA	67%	8	**57%**
9	Standards and BMPs***	75%	88%	49	**84%**
10	Community	100%	NA	24	**86%**
11	Green Asset Evaluation	NA	NA	13	**65%**
	Total	**77%**	**76%**	**193**	**77%**

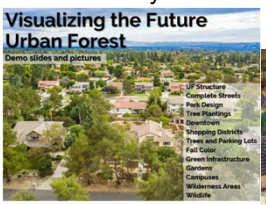
Conclusions

1) Existing Plan & Policy Review – strong policy & plan framework, but needs clarity, connection and prioritization
2) Staff Interviews – City would benefit from SOP development, workflow refinement, internal technical support (City Arborist), policy clarification, & staff training
3) Benchmarking – Should consider funding & resource needs, street tree maintenance responsibility, updates to TMC, landmark tree preservation, & ROW tree protection
4) Data Analysis – Data (TCA, UHI study, inventory, & Equity Index) should be used to prioritize tree planting and management strategies
5) Community Interests & Input – most people see trees as important contributors to quality of life, but have noticed a decline in Tacoma's trees. They suggest an increase in resources to improve health and increase canopy
6) UFSMA – City scored 77%. Areas of improvement include professional capacity, funding, and risk management

Next Steps

Engagement

Public Survey #2



Oct. 16th – 30th

Public Meetings (2&3)

Oct. 22nd
Nov. TBD

IPS presentation #3

Nov. 20th

Phase 1 plan – Oct. 28
Phase 2 plan – Nov. 18

Final Plan

UFMP Council Adoption

Dec. 2019

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