

# Urban Forest Program Update

City of Tacoma, Environmental Services

Office of Environmental Policy and Sustainability

Infrastructure Planning and Sustainability

August 10, 2016



# Meeting Objectives

- Present brief history on urban forestry in Tacoma
- Provide overview of current organization and roll of Urban Forestry Program
- Detail national urban forest benchmarking statistics
- Discuss Urban Forest Management Plan and level of service concept



# Urban Forestry Program History

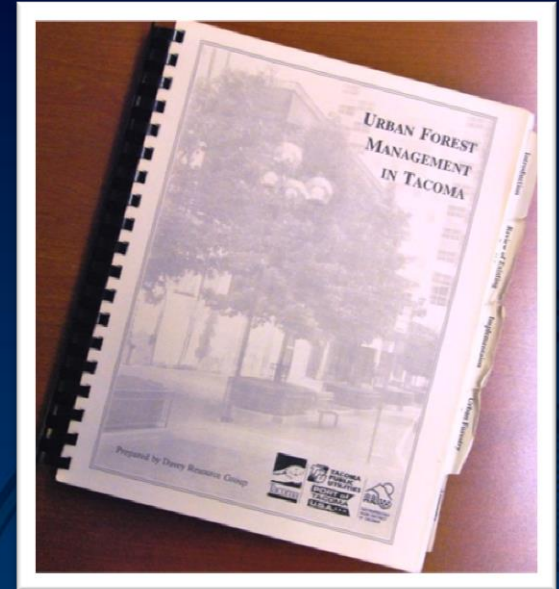
Date	Historic Event
1927	<ul style="list-style-type: none"><li>• First ordinances regulating street trees (TMC 9.18 Tree and Shrub Pruning and Removal, and 9.19 Tree and Shrub Planting)</li></ul>
1990	<ul style="list-style-type: none"><li>• TMC 9.20 View Blockage regulation adopted</li><li>• First Urban Forester hired (Grounds Maintenance)</li></ul>
1992	<ul style="list-style-type: none"><li>• Original Urban Forest Management Plan developed</li></ul>
1994	<ul style="list-style-type: none"><li>• Urban Forestry Program relocated to Public Works, Engineering</li></ul>
Late 90s	<ul style="list-style-type: none"><li>• Free residential street tree program started</li></ul>
Mid 2000s	<ul style="list-style-type: none"><li>• Urban Forestry Program budget reduced</li><li>• Urban Forester position transitioned to part time</li></ul>
2005	<ul style="list-style-type: none"><li>• 3 FTE arborist crew suspended</li></ul>
2008	<ul style="list-style-type: none"><li>• Full time Urban Forester hired</li></ul>

# Urban Forestry Program History

Date	Historic Event
2010	<ul style="list-style-type: none"><li>• Urban Forest Policy Element adopted in Comprehensive Plan</li><li>• 30% canopy cover goal by the year 2030 adopted – “30 by 30”</li><li>• Urban Forestry Program relocated to Environmental Services</li></ul>
2011	<ul style="list-style-type: none"><li>• Tree Coupon Program replaced residential street tree program</li></ul>
2013	<ul style="list-style-type: none"><li>• Environmental Services Nursery constructed (Tacoma Landfill)</li></ul>
2014	<ul style="list-style-type: none"><li>• Revisions to TMC 13.06.502 Landscaping and Buffering adopted</li><li>• Urban Forest Manual adopted</li></ul>
2015	<ul style="list-style-type: none"><li>• Landscaping development standards adopted (standard plans).</li><li>• Urban Forestry program transition to the Office of Environmental Policy and Sustainability from Environmental Program Group</li><li>• New Comprehensive Plan adopted; maintains “30 by 30”</li></ul>
2016	<ul style="list-style-type: none"><li>• New Urban Forester hired</li><li>• Environmental Action Plan adopted</li></ul>

# Urban Forest Management Plan ca. 1992

- Resolution No. 31309 – “To adopt a comprehensive urban tree management program for the City of Tacoma, Metropolitan Parks District, Port of Tacoma and Tacoma Public Utilities.”



Introduction	Existing Conditions
Implementation Framework	Urban Forestry Program

# Urban Forest Management Plan ca. 1992

- 6 Goals Defined:
  - Provide staff support for urban forest management
  - Provide legal basis for the Urban Forestry Program
  - Establish formal tree care program for the City
  - Provide adequate record keeping tools for urban forest management
  - Transform the major urban forestry participation of TPU from line clearance to energy conservation and community support
  - Provide the socio-political climate so an urban forest synergy can flourish



# Internal Coordination

## Urban Forestry Program

### Office of Environmental Policy and Sustainability

Environmental Services	Public Works	Community and Economic Development	Neighborhood and Community Services	Planning and Development Services
Surface water benefit	Focus on public safety	Attractive destination city	Healthy and successful neighborhoods	Livable, sustainable and safe city
Protection and enhancement of the environment	Street trees	Enhancing livability and strengthening economy	Code enforcement and human services	Permitting (development) services

# External Coordination

## Urban Forestry Program City of Tacoma

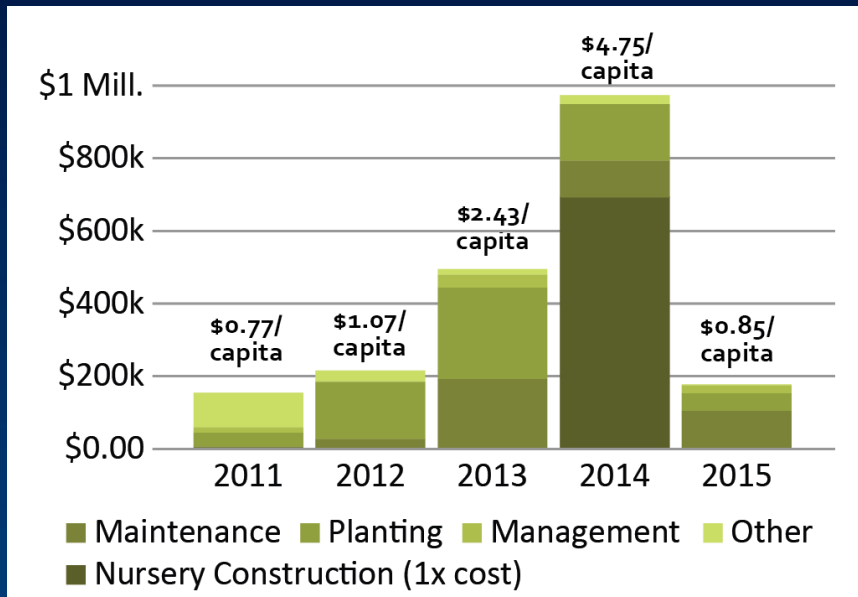
<u>Metropolitan Parks District</u>	<u>Tacoma Public Utilities</u>	<u>Port of Tacoma</u>	<u>Local Organizations</u>	<u>Public</u>
Large landowner with similar land management practices	Public safety and infrastructure protection	Manage cargo operations and strengthen Puget Sound gateway	Partnership opportunities with community and large landowners	The City's greatest asset
Significant contributions to parks and open spaces	Utility line clearance and appropriate tree selection	Habitat mitigation sites and miles of improved road	Other government agencies and nonprofits	26% of City is right-of-way  31.4% of City is Single Family Residential



# Benchmarking Research

## APWA Urban Forestry BMPs for Public Works Managers

### Tacoma Urban Forest Expenditures 2011-2015



Average Annual Budget: \$1.31 per capita

*\*Excludes capital and open space programs, Metro Parks and TPU expenditures*

### National Average Municipal Urban Forest Budget Per Capita

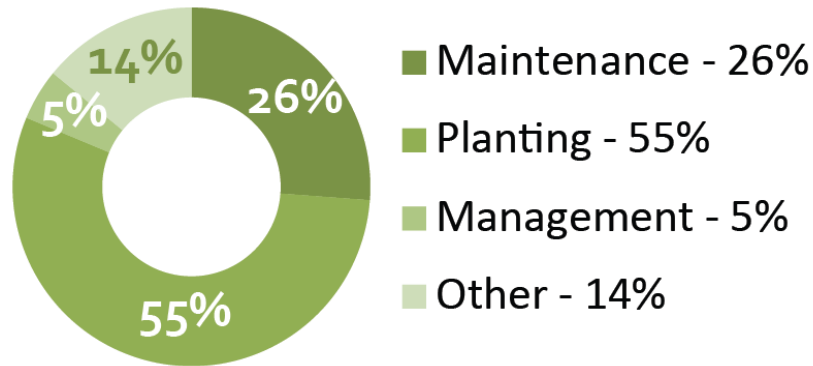
Population	Annual Budget	Per Capita
0 - 9,999	\$38,635	\$10.58
10,000 - 29,999	\$172,465	\$9.57
30,000 - 49,999	\$336,465	\$8.73
50,000 - 99,999	\$510,800	\$7.50
100,000+	\$1,869,440	\$5.83

*Reported by 3,130 Communities (2006)*

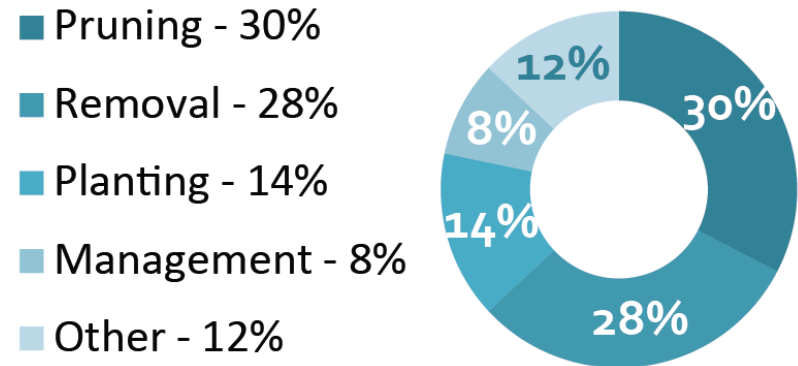
# Benchmarking Research

## *APWA Urban Forestry BMPs for Public Works Managers*

### Tacoma Average Urban Forest Budget Allocation



### National Average Urban Forest Budget Allocation



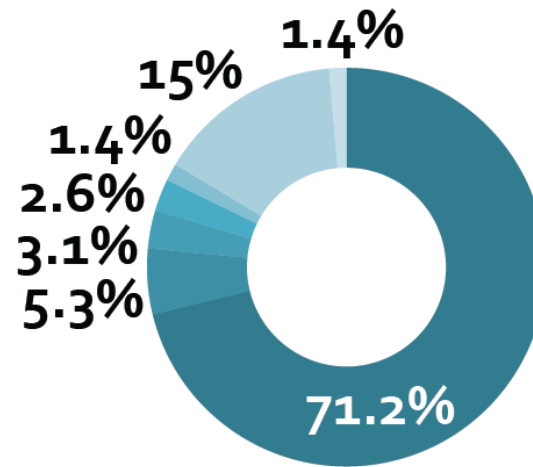
*APWA Urban Forestry BMPs for Public Works Managers (2007)*

# Benchmarking Research

## *APWA Urban Forestry BMPs for Public Works Managers*

### National Average Source of Funding

- General Fund - 71.2%
- Assessment District - 5.3%
- Gas Tax - 3.1%
- State/Federal Grants - 2.6%
- Stormwater/Utility - 1.4%
- Other - 15%
- Permit Fees - 1.4%



*Municipal Tree Care and Management in the U.S. (2014)*

# Benchmarking Research

## *APWA Urban Forestry BMPs for Public Works Managers*

### Tacoma Urban Forest Staffing 2011 – 2015

	2011	2012	2013	2014	2015
Staff	1 FTE	1.5 FTE	1.5 FTE	0.25 FTE	0.5 FTE
Interns	0.75 FTE			0.5 FTE	

*Average Annual FTEs: 1.2*

### National Average Daily Number of Municipal Urban Forest Employees by Population (1994)

Population	Employees
250k to 500k	23
<b>100k to 250k</b>	<b>9</b>
50k to 100k	6
25k to 50k	4
10k to 25k	2
2.5k to 10k	1

# New Urban Forest Management Plan

## Existing Conditions Audit

- Internal stakeholder needs assessment
- Municipal Code and policy review
- Operations

## Benchmarking Research

- Program analysis across the U.S.
- Provide tools to define LOS

## Cost/Benefit Analysis

- Ecosystem services analysis
- Cost to maintain vs. benefit to retain

## Implementation Strategies

- Alternatives analysis
- Effective and efficient LOS

## Tree Risk Reduction Plan

- Emergency response plan
- Management strategies for delicate situations

## Trees & Sidewalks Operations Plan

- Evaluation criteria for tree preservation and/or removal
- Tree protection during construction

# Level of Service Concept

## *APWA Urban Forestry BMPs for Public Works Managers*

### Minimum (Reactive) LOS

- Responsiveness to emergencies and high priority complaints
- The least efficient, with low customer satisfaction

### Adequate (Routine) LOS

- Responsiveness to emergencies and citizen requests
- Routine tree maintenance and scheduled planting programs

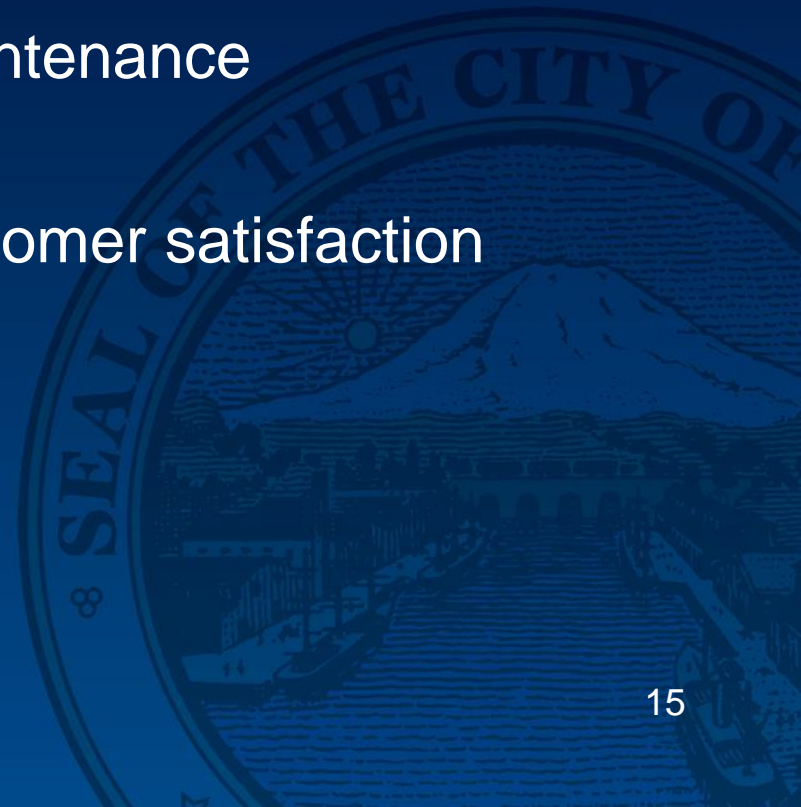


# Level of Service Concept

*APWA Urban Forestry BMPs for Public Works Managers*

## High (Proactive) LOS

- Comprehensive emergency, pest and disease response
- Preventative tree care and maintenance
- Education/outreach
- Most efficient, with highest customer satisfaction



# Next Steps

- Benchmarking research and existing conditions audit in progress
- Pending budget approval, Urban Forest Management Plan to start in 2017
- Implementation of Urban Forest Management Plan to start in 2017/18



# Referenced Reports

APWA (2015). *Urban Forestry Best Management Practices for Public Works Managers*:

<https://www2.apwa.net/about/coopagreements/urbanforestry/>

Hauer R. J. and Peterson W. D. 2016. *Municipal Tree Care and Management in the United States: A 2014 Urban & Community Forestry Census of Tree Care Activities (2016)*:

<http://www.uwsp.edu/cnr/Documents/MTCUS%20-%20Forestry/Municipal%202014%20Report%20Executive%20Summary.pdf>

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