

COMPREHENSIVE PLAN IMPLEMENTATION PROJECT – PROPOSED CODE AMENDMENTS

City Council Hearing #1

January 18, 2022

Natalie Rogers, Climate and Natural
Resources Manager

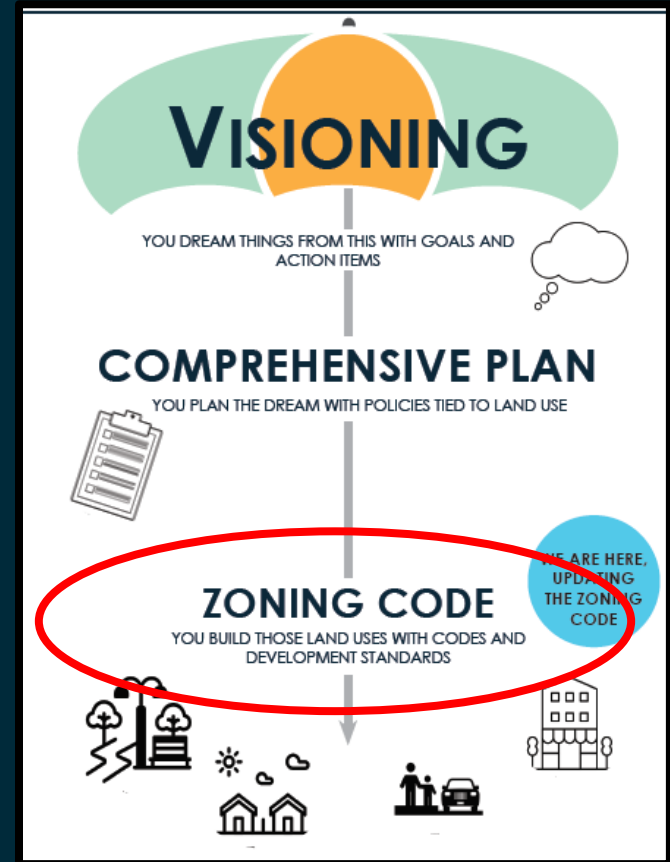
&

Vera Kolas, Senior Planner



PROJECT BACKGROUND

- Implements Comprehensive Plan update
 - Update adopted August 2020
- Implements Oregon House Bill 2001 (HB2001)
 - Expanded housing options
- Focus: Housing, Trees and Parking

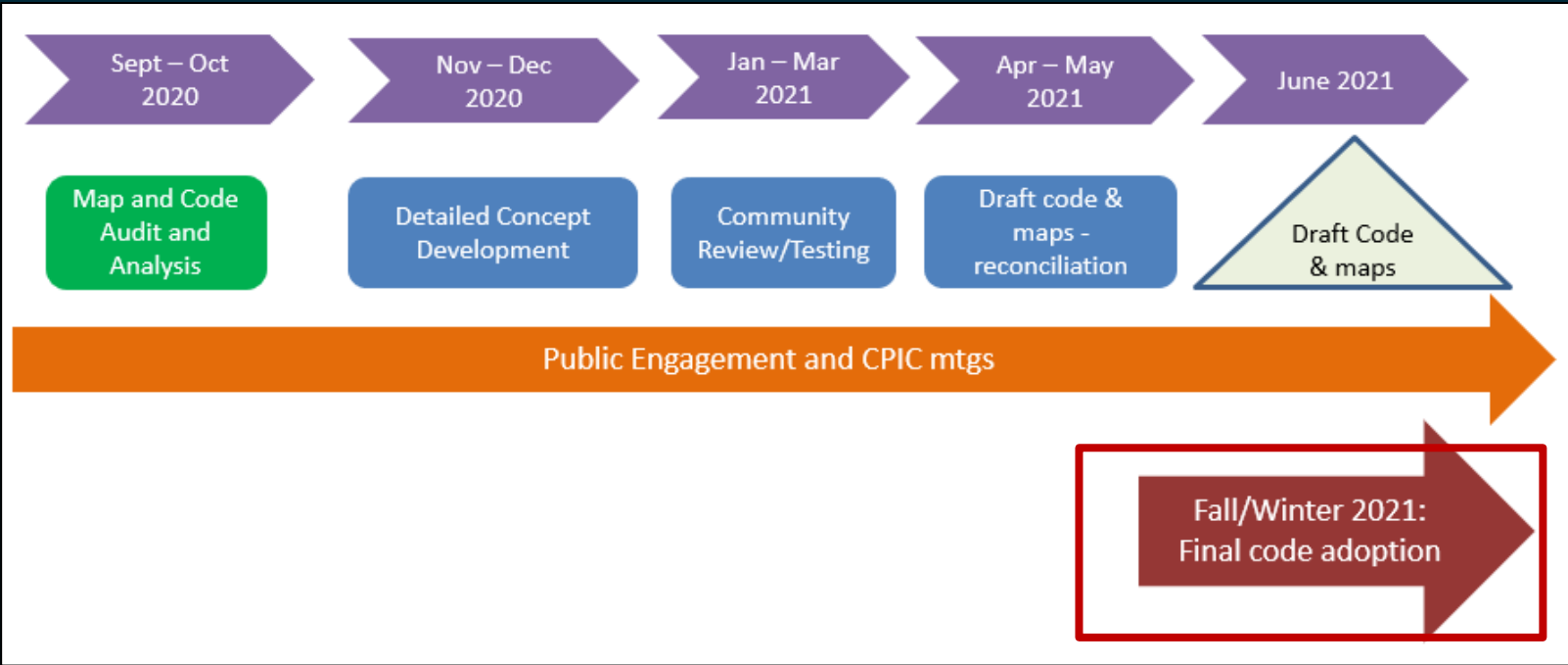


COMPREHENSIVE PLAN - POLICY MANDATES

- Increase supply of middle housing; provide housing choice
- Increase the tree canopy and preserve existing trees; support the goal of 40% tree canopy
- Manage parking to enable middle housing and protect trees



PROJECT PROCESS



WORK SESSIONS

Planning Commission

Project Updates	Code Review
Oct. 27	Aug. 5
Nov. 24	Aug. 10
Jan. 12	Aug. 24
Feb. 23	
Mar. 23	
Apr. 27	
May 25	
June 8	
July 13	

City Council

Project Updates	Code Review
Dec. 1	Dec. 21
Jan. 19	Jan. 4
Feb. 16	
Apr. 6	
Apr. 20	
May 11	
June 15	



PC CODE REVIEW SCHEDULE

October 12: Middle housing and parking

- Take public testimony; Deliberate; Continue hearing

October 26 : Middle housing and parking

- Address lingering questions from tonight; Take public testimony; Deliberate; Continue hearing

November 9: Development-related Tree Code

- Recommendation to Council
- Vote 5-2 to recommend approval



CC CODE REVIEW SCHEDULE

TONIGHT: Hearing #1: Tree Code

February 1: Hearing #2: Tree Code and Fees - Adoption

February 15: Hearing #3: Middle Housing & Parking

March 1: Hearing #4: Middle Housing & Parking - Adoption



PUBLIC ENGAGEMENT – SUMMARY OF ACTIVITIES

- Project webpages (City of Milwaukie and Engage Milwaukie)
- Pilot newsletter articles: 12 articles
- CPIC meetings: 9
- Stakeholder interviews: 32 interviews in October
- Virtual open houses: 3 (English and Spanish)
- Community Surveys: 2 (English and Spanish)
- Email blasts and social media posts
- Handouts (English and Spanish)
 - Library, Farmers Market, Hillside, Wichita Center, Northwest Housing
- Neighborhood District Association (NDA) presentations
- Small group discussions (in both Spanish and English)
- Tree Board meetings (numerous)
- Planning Commission and City Council monthly updates
 - 3 Planning Commission code work sessions in August



PUBLIC ENGAGEMENT – PUBLIC HEARINGS

- 9/1 – 35-day public notice
 - Project webpages, Email blast, Executive Summary posted, City social media
- 9/22 – 20-day notice
 - Email blast, Mailed postcard to all residential and business properties (English and Spanish)
- 9/28 – presentation to Milwaukie Rotary
- NDA's: Materials send to each NDA in September
- 10/6 and 10/20: Measure 56 notice mailed re: Tree code
- 12/16 – 30-day hearing notice
 - Engage Milwaukie, Email Blast
- 12/28 – CPIC and NDA update email; Engage Milwaukie updates
- 1/12 and 1/13 – email blast; City social media
- 2/1 – Pilot article



COMPREHENSIVE PLAN - POLICY MANDATES

- Increase supply of middle housing; provide housing choice
- Increase the tree canopy and preserve existing trees; support the goal of 40% tree canopy
- Manage parking to enable middle housing and protect trees



QUESTIONS?



Residential Tree Code

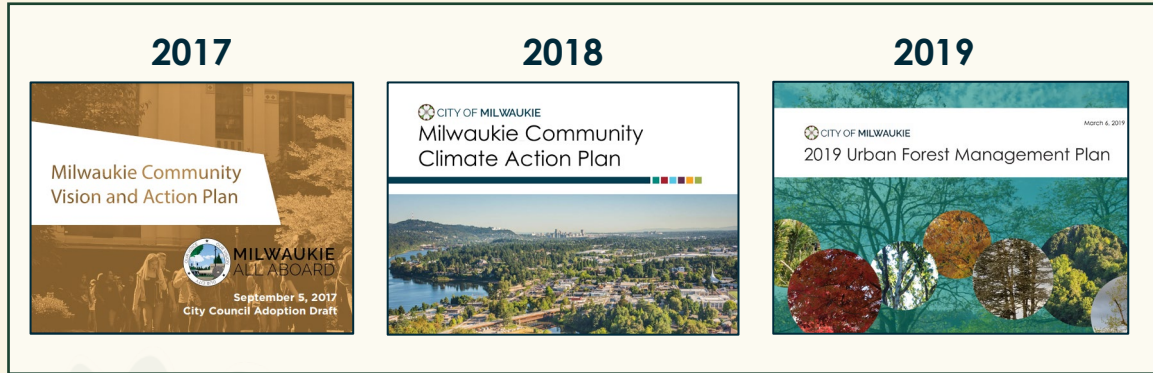
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503-786-7655

Milwaukieoregon.gov/trees



Trees in Milwaukie's Comprehensive Plan



"In 2040, Milwaukie is a flourishing city that is entirely equitable, delightfully livable, and completely sustainable.... Milwaukie nurtures a verdant canopy of beneficial trees, promotes sustainable development, and is a net-zero energy city."
– Milwaukie 2040 Community Vision



2020

Why 40% Canopy Cover?



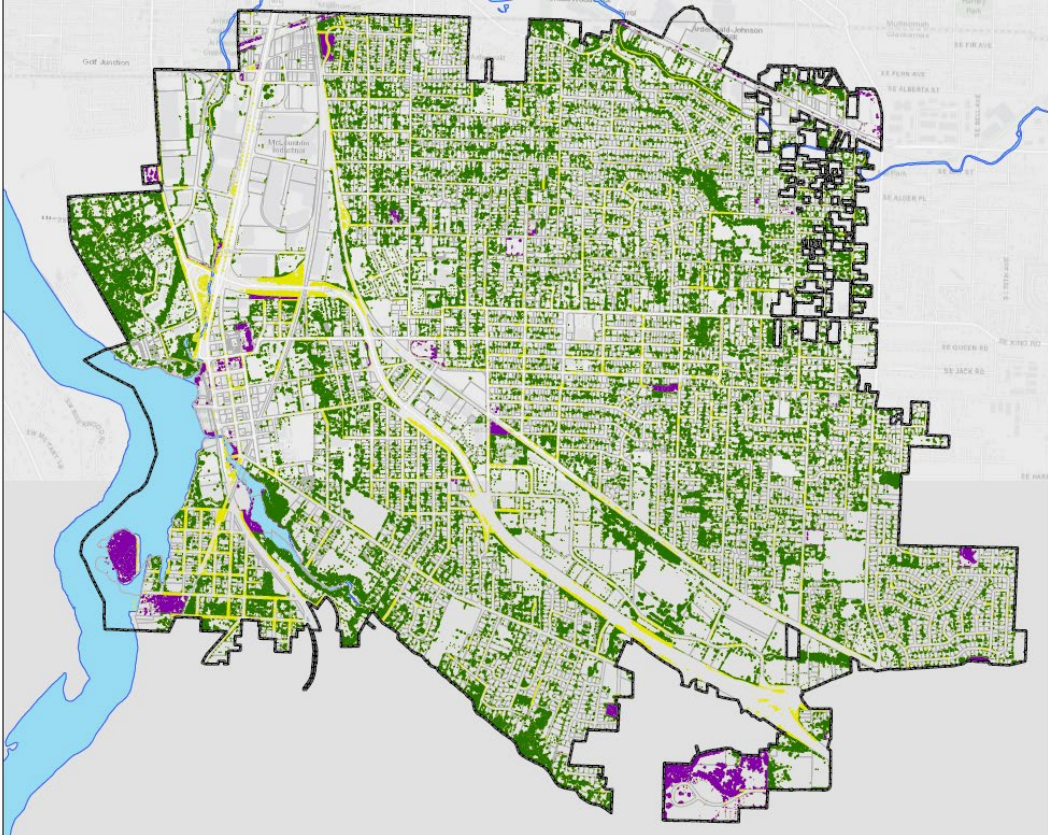
City of Milwaukie 2014 Tree Canopy Coverage Over Private & Public Property

- City of Milwaukie
- Canopy Over Private Parcels
- Canopy Over Public Parcels
- Canopy Over Public Right-of-Way

Note: Developed using LIDAR and Imagery collected in the summer of 2014. Canopy was detected using a combination of normalized difference vegetation index (NDVI) from the imagery and feature heights from LIDAR.

Public parcels defined as any parcel with owner listed as 'City of Milwaukie', 'City of Portland', 'Clatsop County', 'Metro', or 'State of Oregon'.

Percentage of tree canopy was determined by removing all tree canopy found within publicly-owned parcels or outside of parcel boundaries. In 2014, the estimate for tree canopy over private property was roughly 676.7 acres, representing 80% of Milwaukie's 844.57 total acres of canopy.



Date Source: City of Milwaukie GIS, Clatsop County GIS, Metro Data Resource Center

Date: Wednesday, July 16, 2014

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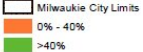
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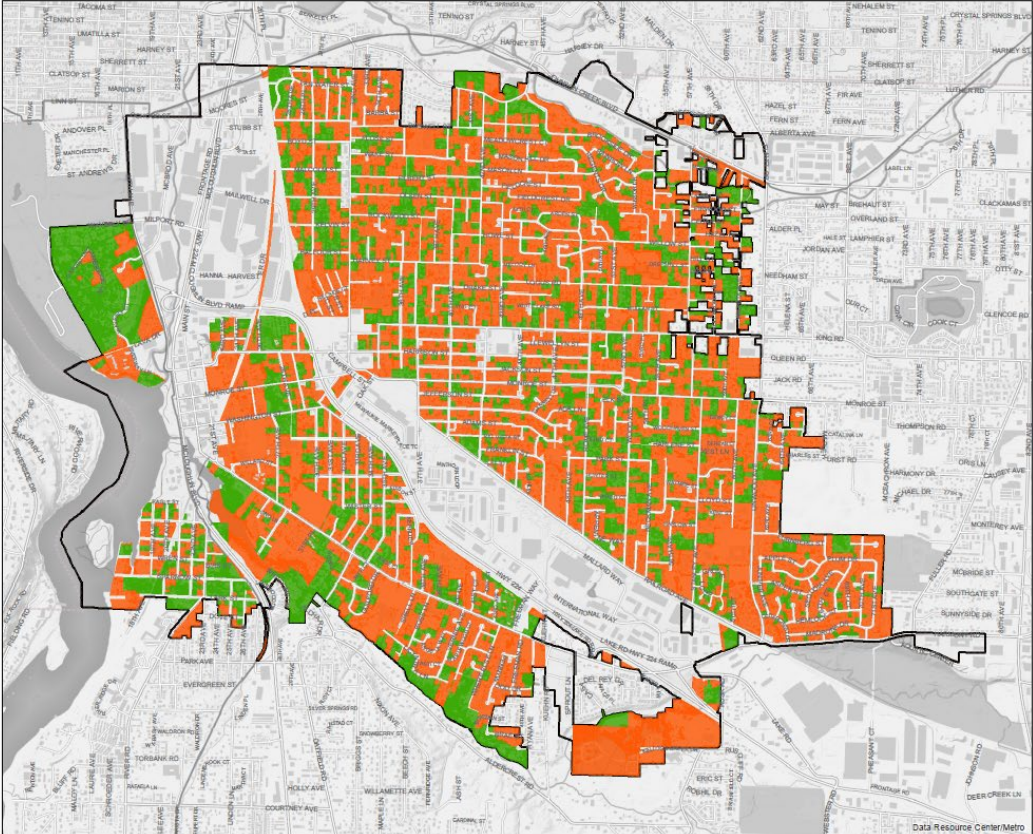
Why 40% Canopy Cover?



2014 Canopy - >40% Residential Canopy Coverage Goal



Developed by City of Milwaukee GIS using 2014 Metro Tree Canopy



Data Sources: City of Milwaukee GIS, Clarkston County GIS, Metro Data Resource Center

Date: Wednesday, November 3, 2021

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GIS Coordinator
City of Milwaukee
6101 SE Johnson Creek Blvd.
Milwaukee, WI 53228
(414) 786-7687



Data Resource Center/Metro

Pacific Northwest Continues to Bake Beneath 'Heat Dome'

A wave of ocean air provided some relief after Portland, Ore., reached 116 degrees on Monday. Temperatures reached the 90s there on Tuesday, forecasters said.



SCIENCE ENVIRONMENT

Salem Issues Another Drinking Water Advisory Over Cyanotoxins



By **Ericka Cruz Guevarra** (OPB)

Portland, Ore. June 6, 2018 10:53 a.m.



UPDATE (1:40 p.m. PT) — Salem has issued yet another drinking water advisory Wednesday for the city's vulnerable populations – just four days after lifting an initial advisory that prompted Governor Kate Brown to issue an emergency and activate the National Guard.

Milwaukie issues local state of emergency, bans fireworks due to heat, wildfire risk

by KATU Staff | Wednesday, June 30th 2021

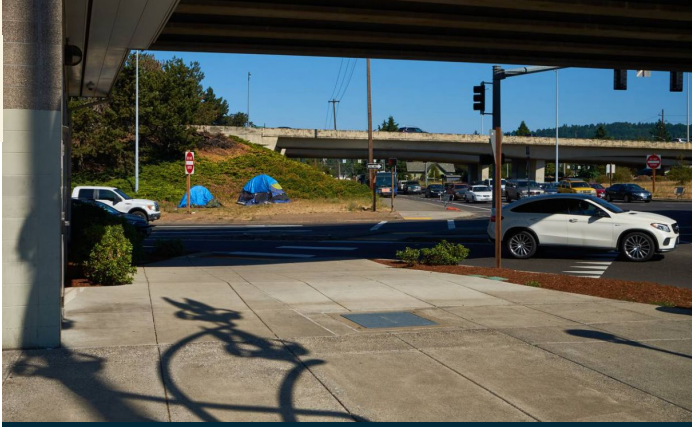
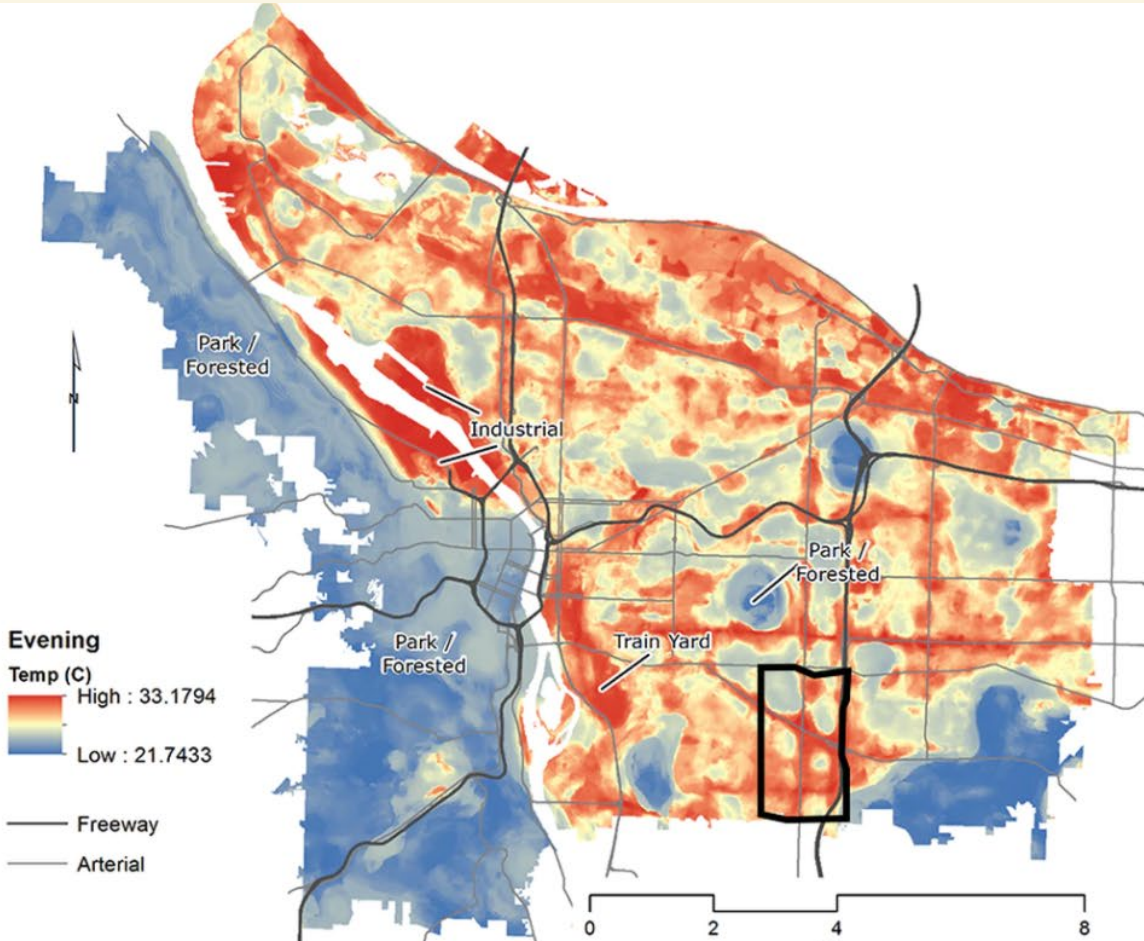


Clackamas County cooling centers open for heat relief

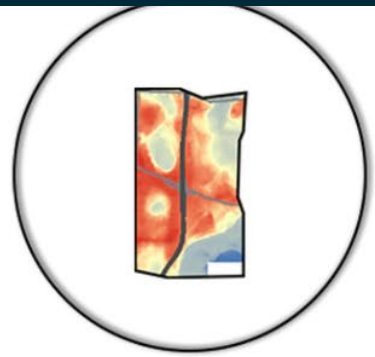
 Jaelen Ogadhoh  July 30 2021

17 locations are open countywide for residents wanting to escape this weekend's high temperatures

Shandas Heat Map HOT SPOT: Shandas' map showing the hottest areas of Portland during the evening. The inset shows ZIP code 97266, where Shandas found the hottest temperatures in Portland



At about 4 pm, the temperature in the air was **124 degrees**. That was 9 degrees hotter than the city's average, and 25 degrees higher than what Shandas measured in Northwest Portland. And the **sidewalk was superheated to 180 degrees**. Walking on it barefoot would give you third-degree burns. week.com/news/city/2021/07/14/this-is-the-hottest-place-in-portland/







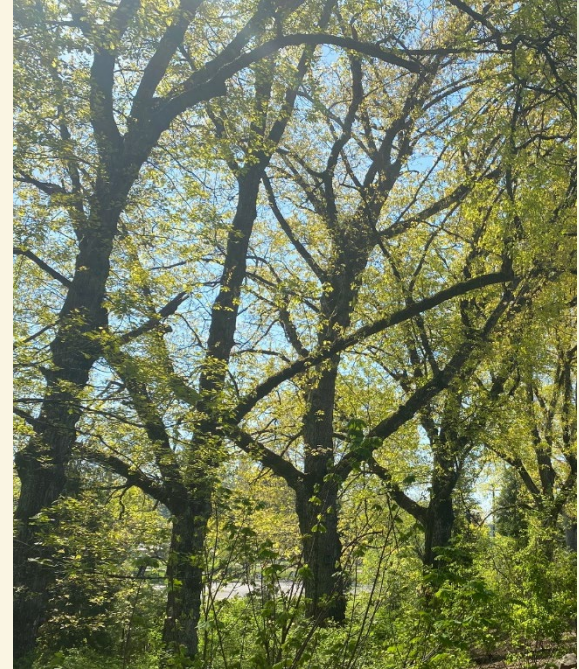
Residential Non-Development

Tree removals not related to development

- Landscaping
- Tree-specific removals

Permit required for removal if tree DBH >6”

- Type 1 Permit for streamlined approval standards
- Type 2 Permit for multiple removals or removals not meeting Type 1 standards
- City Manager Appeal Process



Residential Non-Development

Permit required for trees* >6" diameter at breast height (DBH)

Type 1 Tree Permit

- Dead/dying/diseased
- Unmitigable infrastructure impacts
- Public safety risk
- Invasive
- Fire hazard
- Public transportation ROW projects
- Utility infrastructure or building permit
- One Healthy Tree per Year <12" DBH

Type 2 Tree Permit

- Healthy tree >12" DBH
 - *Public notice required*
- More than one healthy tree >6"DBH approved through type 1 removal

Replanting Requirements

- Replanting requirement for type 1 and type 2 tree removals
- Additional replanting inches required for Type 2 >18" DBH tree removal
- Exemption for invasive tree removal or approved thinning removal
- Fee-in-lieu of replanting option available

Agricultural Trees exempted from tree code?

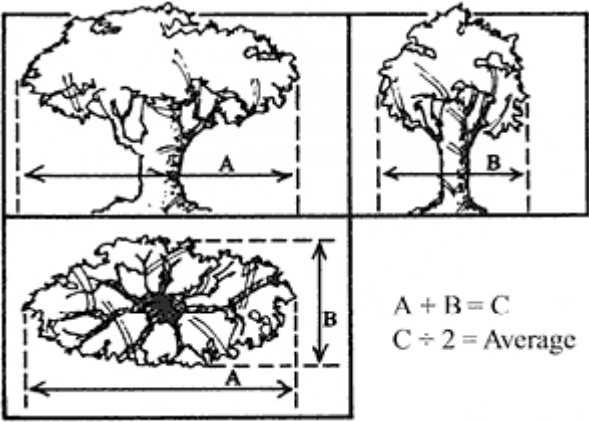


Residential Development

- Tree removals and preservation related to development
 - Land Divisions
 - Construction of new residential dwelling units*
- Key standards
 - Preservation Standards
 - Canopy Standards
 - Protection Standards
 - Soil Volume Standards



Canopy Measurements



Common Name	Family	Growth Type	Species Type	Street Tree	Native Tree	Drought Tolerant	Moist Soil	Utility Safe	Root Damage	Mature Height (feet)	Mature Width (feet)	Mature Canopy Area	Annual Growth Height	Annual Growth Width	Average Growth Rate	Est 20 year Canopy (sq ft)	Longevity (if available)
Glossy Abelia	Caprifoliaceae	Shrub	Deciduous	No	No	No	No	No		6	6	28.27431			Rapid		Moderate
Silver Fir	Pinaceae	Tree	Evergreen	No	Yes	No	No	No		100	15	176.71444	6-12 inches	4-6 inches	12-24 inches/season	110	>150 years
White Fir	Pinaceae	Tree	Evergreen	No	Yes	No	Yes	No		120	15	176.71444	6-12 inches	4-6 inches	12-24 inches/season	110	>150 years
Grand Fir	Pinaceae	Tree	Evergreen	Yes	Yes	No	Yes	No		200	20	314.159	12-18 inches	8-12 inches	24-36 inches/season	240	>150 years
Subalpine Fir	Pinaceae	Tree	Evergreen	No	Yes	No	Yes	No		90	15	176.71444	2-4 inches	2-3 inches	12 inches/season	50	>150 years
Noble Fir	Pinaceae	Tree	Evergreen	No	Yes	No	Yes	No		200	20	314.159	12-18 inches	8-12 inches	24-36 inches/season	240	>150 years
Hedge Maple	Sapindaceae	Tree	Deciduous	Yes	No	No	No	Yes	Low	35	25	490.87344			12 inches/season		40-150 years
Queen Elizabeth Hedge Maple	Sapindaceae	Tree	Deciduous	Yes	No	No	Yes	No	Low	50	25	490.87344			12 inches/season		40-150 years
Japanese snakebark Maple	Sapindaceae	Tree	Deciduous	No	No	No	Yes	No	Low	35	35	962.11194			24 inches/season		40-150 years
Vine Maple	Sapindaceae	Both	Deciduous	No	Yes	No	Yes	No	Low	25	20	314.159	12-24 inches	12 inches	24 inches/season	240	40-150 years
Scarlet Sentinel Maple	Sapindaceae	Tree	Deciduous	Yes	No	Yes	Yes	No		40	20	314.159			24 inches/season		50-150 years
Paperbark Maple	Sapindaceae	Tree	Deciduous	Yes	No	No	Yes	Yes	Low	25	15	176.71444			12-24 inches/season		40-150 years
Bigleaf Maple	Sapindaceae	Tree	Deciduous	No	Yes	Yes	Yes	No		75	30	706.85775	36 inches	24 inches	36 inches/season	480	>150 years
Greencolumnar Maple	Sapindaceae	Tree	Deciduous	Yes	No	No	No	No		50	20	314.159			12-24 inches/season		50-150 years
Japanese Maples(s)	Sapindaceae	Both	Deciduous	No	No	No	Yes	Yes	Low	25	30	706.85775			12-24 inches/season		50-150 years
Columnar Norway Maple	Sapindaceae	Tree	Deciduous	Yes	No	No	No	No		50	15	176.71444			12 inches/season		
Parkway Maple	Sapindaceae	Tree	Deciduous	Yes	No	No	No	No		45	15	176.71444			12 inches/season		50-150 years
Crimson Sentry Maple	Sapindaceae	Tree	Deciduous	No	No	Yes	Yes	No		25	15	176.71444			24 inches/season		50-150 years
Emerald Queen Norway Maple	Sapindaceae	Tree	Deciduous	Yes	No	Yes	Yes	No		50	40	1256.636			36 inches/season		50-150 years
Globe Norway Maple	Sapindaceae	Tree	Deciduous	Yes	No	Yes	Yes	Yes	Low	25	25	490.87344			12-24 inches/season		
Red Maple	Sapindaceae	Tree	Deciduous	No	No	Yes	Yes	No		65	40	1256.636			36 inches/season	315	50-150 years
Armstrong red maple	Sapindaceae	Tree	Deciduous	No	No	Yes	Yes	No		50	15	176.71444			36 inches/season		50-150 years
Bowhall Maple	Sapindaceae	Tree	Deciduous	Yes	No	Yes	Yes	No	Low	50	15	176.71444	18-24 inches	9-12 inches	24 or more inches/season	129	50-150 years
Fransred Red Sunset Maple	Sapindaceae	Tree	Deciduous	No	No	No	No	No		45	35	962.11194			24 or more inches/season		50-150 years
Karpick Red Maple	Sapindaceae	Tree	Deciduous	Yes	No	No	Yes	No		45	20	314.159			12-24 inches/season		50-150 years
Sugar Maple	Sapindaceae	Tree	Deciduous	No	No	No	Yes	No		50	35	962.11194			24-36 inches/season	315	>150 years
Bonfire Sugar Maple	Sapindaceae	Tree	Deciduous	Yes	No	No	Yes	No		65	35	962.11194			24 inches/season		100-175 years
Commemoration Maple	Sapindaceae	Tree	Deciduous	Yes	No	No	No	No		50	35	962.11194			24 inches/season		50-150 years
Green Mountain Sugar Maple	Sapindaceae	Tree	Deciduous	Yes	No	Yes	Yes	No		40	35	962.11194			24-36 inches/season		50-150 years
Shantung Maple	Sapindaceae	Tree	Deciduous	No	No	No	Yes	Yes	Low	25	30	706.85775			24-36 inches/season		50-150 years
Keithsform Pacific Sunset Maple	Sapindaceae	Tree	Deciduous	Yes	No	No	No	No		35	25	490.87344					
Warrenred Pacific Sunset Maple	Sapindaceae	Tree	Deciduous	Yes	No	No	No	No		30	25	490.87344	18-24 inches	12-18 inches		352	
Autumn Blaze Maple	Sapindaceae	Tree	Deciduous	Yes	No	Yes	Yes	No		55	30	706.85775			24 inches/season		

Residential Development – Preservation Standards

- Established to protect existing trees on site
- No breakdown of species priority besides additional fees for removal of rare or threatened species
- Invasive species not included
- Mitigation required if removing past 30% onsite canopy (20% for affordable housing)

New Canopy Coverage	Mitigation Fee
<30% - 22.5%	\$
<22.5% - 15%	\$
<15% - 7.5%	\$
<7.5% - 0%	\$



30% Existing Site Canopy
Removal of tree
24% site coverage
Ex. 1 x \$ Mitigation Fee



50% Existing Site Canopy
Removal of tree
20% site coverage
Ex. 2 x \$ Mitigation Fee



90% Existing Site Canopy
Removal of 3 trees
70% site coverage
Ex. No Mitigation Fee

Residential Development – Canopy Standards

- Tree canopy goals of 40% canopy cover by 2040
- Canopy standards ensure **intentional preservation and planting** on development sites to achieve canopy goals
- 40% tree canopy coverage required on completed development sites through **existing tree canopy** or through **future mature canopy of new plantings**
- Mitigation is performed if unable to meet canopy standards



Tree Location	% Canopy Credit
Existing onsite	100%
Planted onsite	75%
Existing ROW	50%
Planted ROW	50%

10% Site Canopy after Removal

- 7000 sq ft lot
- 700 sq ft existing canopy
- Needs 2800 sq ft to meet canopy standard

New plantings:

2 white oak

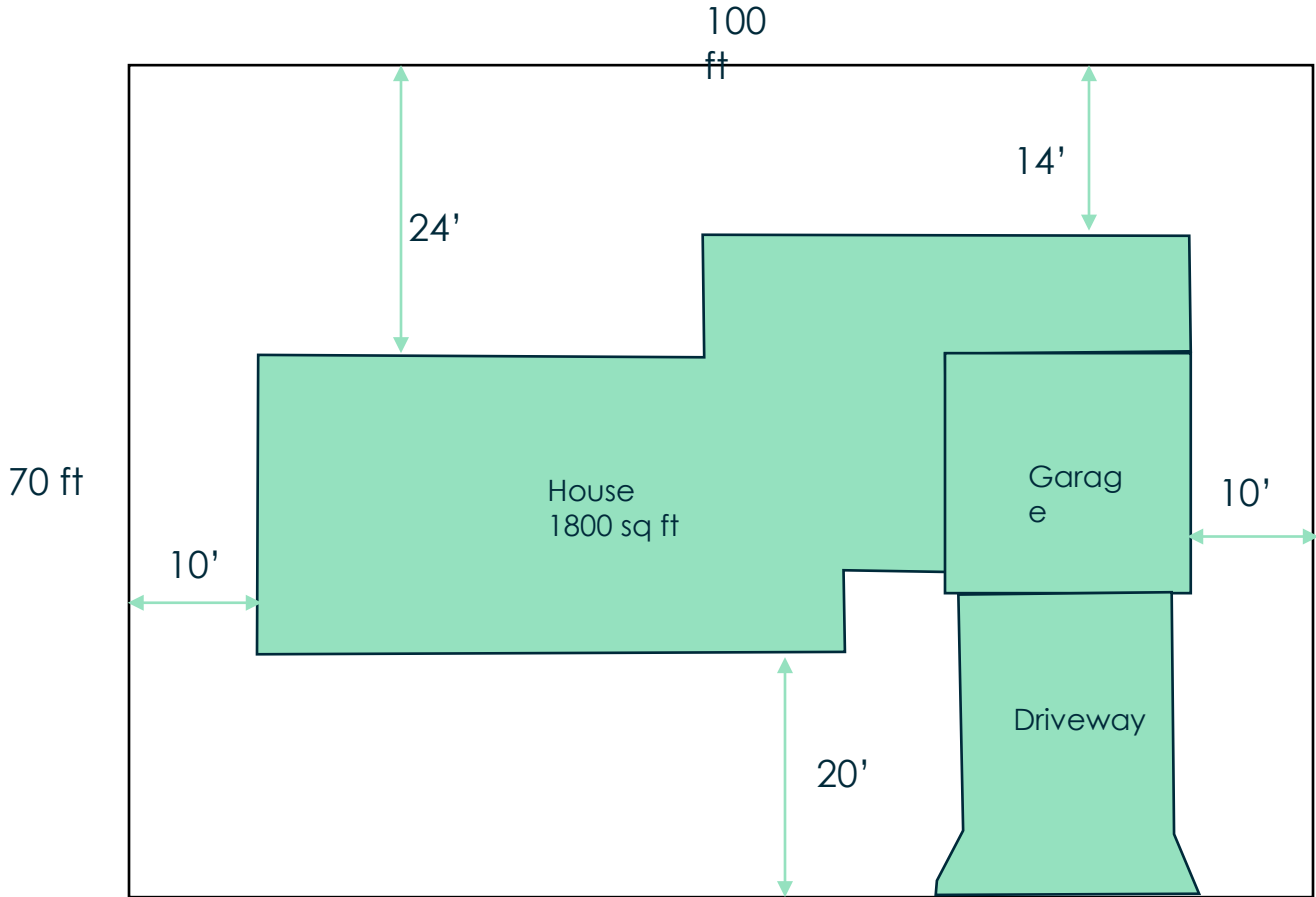
2000 sq ft at maturity
x 75% Canopy Credit
x 2 trees

= **3000 sq ft canopy credit**

3700 total site canopy coverage
52.8% Final Canopy Coverage

Alternatively...

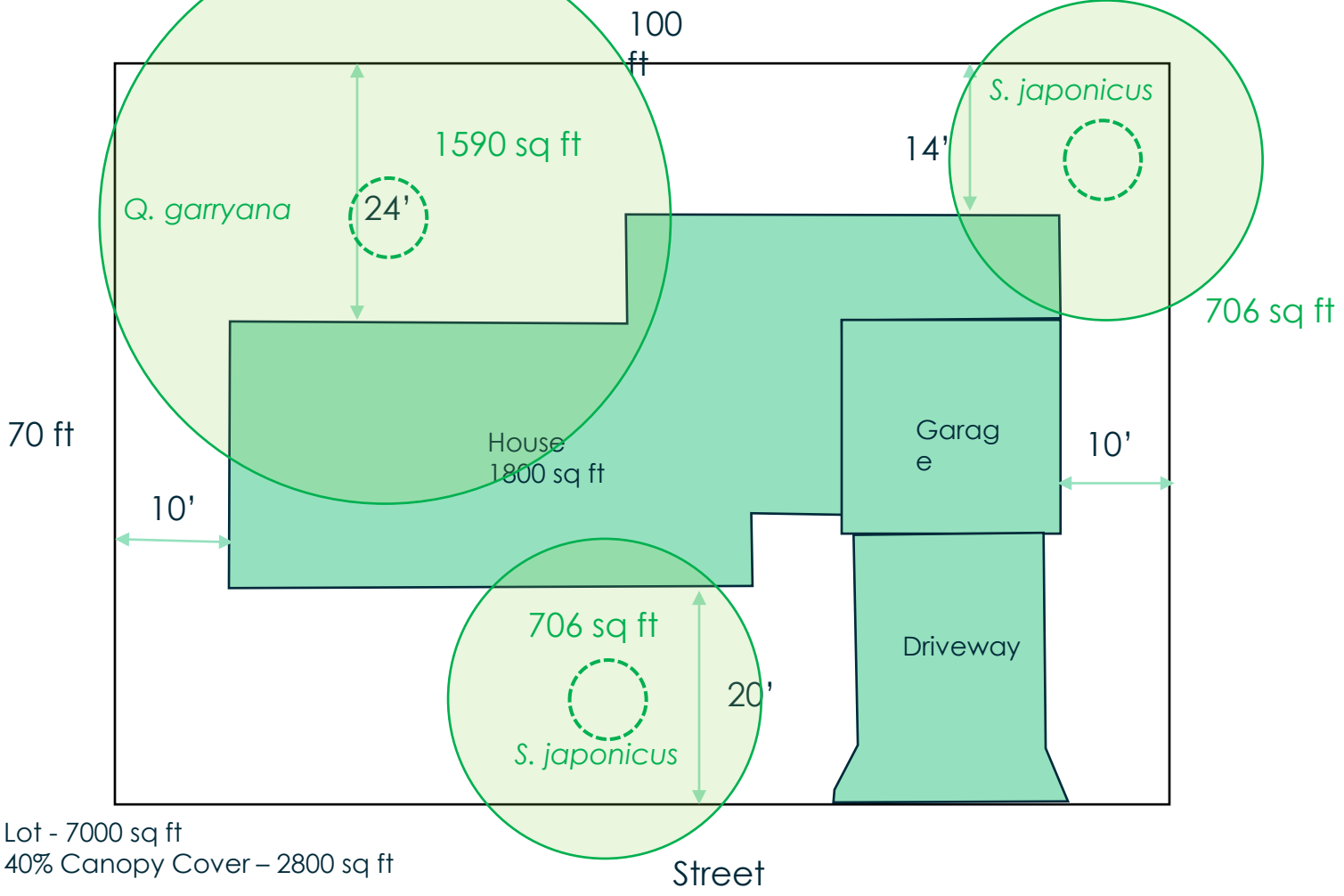
1 Oak @ 1500 sq ft credit
2200 total site canopy coverage
600 sq ft mitigation required



Lot - 7000 sq ft
40% Canopy Cover - 2800 sq ft

Street

Common Name	Family	Growth Type	Species Type	Street Tree	Native Tree	Drought Tolerant	Moist Soil	Utility Safe	Root Damage	Mature Height (feet)	Mature Width (feet)	Mature Canopy Area	Annual Growth Height	Annual Growth Width	Average Growth Rate	Est 20 year Canopy (sq ft)	Longevity (if available)
Spire Cherry	Rosaceae	Tree	Deciduous	Yes	No	No	No	Yes		30	10	78.53975					
Douglas Fir	Pinaceae	Tree	Evergreen	Yes	Yes	No	No	No		160	30	706.85775	12-36 inches	12-24 inches	24 inches/season	480	>150 years
Aristocrat Callery Pear	Rosaceae	Tree	Deciduous	Yes	No	No	No	No		40	30	706.85775			24-36 inches/season		50-150 years
Autumn Blaze Callery Pear	Rosaceae	Tree	Deciduous	Yes	No	No	No	No		30	25	490.87344			24 inches/season		50-150 years
Capital Callery Pear	Rosaceae	Tree	Deciduous	Yes	No	No	No	No		35	12	113.09724			24 inches/season		50-150 years
Chanticleer Callery Pear	Rosaceae	Tree	Deciduous	Yes	No	No	No	No		40	15	176.71444			24 inches/season		50-150 years
Redspire Callery Pear	Rosaceae	Tree	Deciduous	Yes	No	No	Yes	No		35	25	490.87344	18-24 inches	12-18 inches	24-36 inches/season	278	50-150 years
Sawtooth Oak	Fagaceae	Tree	Deciduous	No	No	No	Yes	No		65	30	706.85775			24-36 inches/season		>150 years
Scarlet Oak	Fagaceae	Tree	Deciduous	Yes	No	No	Yes	No		65	45	1590.4299			24-36 inches/season	315	>150 years
Oregon White Oak or Garry Oak	Fagaceae	Tree	Deciduous	No	Yes	No	No	No	Low	65	45	1590.4299	12 inches	6 inches	12-24 inches/season	120	50-150 years
English Oak	Fagaceae	Tree	Deciduous	No	No	No	No	No		120	30	706.85775			36 inches/season		>150 years
Skyrocket Oak	Fagaceae	Tree	Deciduous	Yes	No	No	No	No		45	15	176.71444					
Red Oak	Fagaceae	Tree	Deciduous	Yes	No	No	Yes	No		65	40	1256.636			24-36 inches/season	315	>150 years
Pacific Rhododendron	Ericaceae	Shrub	Evergreen	No	Yes	No	No	No		10	15	176.71444	12-24 inches	12-24 inches	12 inches/season	180	50-150 years
Western Azalea	Ericaceae	Shrub	Deciduous	No	No	No	No	No		10	8	50.26544	6-12 inches	4-8 inches	Moderate	50	
Pink Idaho Locust	Fabaceae	Tree	Deciduous	Yes	No	Yes	No	No		50	20	314.159			36 inches/season		50-150 years
Coast Redwood	Taxodiaceae	Tree	Deciduous	No	No	No	No	No	Low	100	20	314.159	12-36 inches	12-24 inches	36 inches/season	320	>150 years
Korean Mountain Ash	Rosaceae	Tree	Deciduous	No	No	No	No	No	Low	40	15	176.71444			24 inches/season		50-150 years
Whitebeam Mountain Ash	Rosaceae	Tree	Deciduous	No	No	No	No	No		40	20	314.159			24 inches/season		50-150 years
Cardinal Royal Mountain Ash	Rosaceae	Tree	Deciduous	Yes	No	No	Yes	No		35	20	314.159			24-36 inches/season		50-150 years
Red Cascade Mountain Ash	Rosaceae	Tree	Deciduous	No	No	No	Yes	Yes	Low	20	10	78.53975			12-24 inches/season		40-150 years
Oak-leaf Mountain Ash	Rosaceae	Tree	Deciduous	Yes	No	No	No	No		30	20	314.159					
Japanese Snowbell or Snowdrop	Styracaceae	Tree	Deciduous	No	No	No	Yes	Yes	Low	30	30	706.85775			12-24 inches/season	110	40-150 years
English Yew	Taxaceae	Tree	Evergreen	No	No	Yes	No	No		25	15	176.71444			12 inches/season		>150 years
Irish Yew	Taxaceae	Tree	Evergreen	No	No	Yes	No	Yes	Low	10	5	19.634938			12 inches/season		>150 years
Western Yew	Taxaceae	Tree	Evergreen	No	Yes	Yes	No	No		50	10	78.53975			12 inches/season		>150 years
Japanese Yew	Taxaceae	Tree	Evergreen	No	No	Yes	No	Yes	Low	25	10	78.53975			12 inches/season		50-150 years
Columnar American Arborvitae	Cupressaceae	Tree	Evergreen	No	No	No	Yes	No	Low	25	10	78.53975			24 inches/season	50	50-150 years
Western red cedar	Cupressaceae	Tree	Evergreen	Yes	Yes	No	Yes	No		120	30	706.85775	24-36 inches	12-24 inches	24-36 inches/season	480	>150 years
Excelsa Western Red Cedar	Cupressaceae	Tree	Evergreen	No	No	No	No	No		35	20	314.159					
Green Giant Arborvitae	Cupressaceae	Tree	Evergreen	No	No	No	No	No		60	20	314.159	30-36 inches	12-18 inches		226	
Chancellor Linden	Tiliaceae	Tree	Deciduous	Yes	No	No	Yes	No	Low	50	30	706.85775			12-24 inches/season	175	50-150 years



Lot - 7000 sq ft
 40% Canopy Cover - 2800 sq ft

Street

Clarifying questions?



Residential Development – Protection and Soil Volume Standards

Protection Standards

- Avoid tree harm / death from construction practices
- Protection standards must be followed to obtain preservation and canopy credits
- Must submit protection plan with root protection zone, fencing, etc.
- Performance path available under ISA arborist guidance



Soil Volume Standards

- Ensures new planting success
- 1000 cubic feet per tree
- Must submit protection plan with root protection zone, fencing, etc.
- Performance path available under ISA arborist guidance



Residential Development : Mitigation Standards

- Mitigation standards are established when tree preservation or canopy standards cannot be met.
 - Mitigation fees associated with the **percent canopy removed** (preservation standard) and the **total canopy percentage needed** to meet 40% lot coverage (canopy standard) would be paid by the permit applicant
- Applicants may apply for a variance in lieu of a mitigation fee for alternative construction designs and techniques that provide additional sustainability benefits to the site
 - Planning Commission Review



Credit: Murphy Mears Architects

What should trigger development tree code?

Permit required for trees >6" diameter at breast height (DBH)

As written:

Any additional dwelling units or land division

- Includes ADUs in basements, garages, etc.
- All standards required

Expansion of footprint:

Additional dwelling units that expand the building footprint or land division

- No additional tree plantings
- No protection standards for existing trees, even with construction

Separate standards:

Additional dwelling units that expand footprint:

- All standards apply

Additional dwelling units that do not expand footprint:

- Only protection and preservation standards apply
- Property owner submits protection plan and site map



Private Tree Code – Low Income Assistance

- To the extent that city funds are available, the City Manager may exempt a property owner from the permit fee, removal fees and replanting fees when the owner demonstrates household income that is at or below 80 percent of median household income for the Portland-Vancouver-Hillsboro, OR-WA Metropolitan Statistical Area.
- Consistent with CET, HES and public tree code



Next steps...

Proposed fee schedule and discussion on Feb 1st

Questions?

urbanforest@milwaukieoregon.gov

503-789-7655

milwaukieoregon.gov/trees

Natalie Rogers

Climate and Natural Resources Manager

RogersN@milwaukieoregon.gov

