

# Urban Forestry Management Plan

Phase 3: Plan Development  
Status Update

September 25, 2023



# Overview

1. Project overview: how did we get here?
2. Work completed to date
3. Goals
4. Benefits and challenges
5. Next step

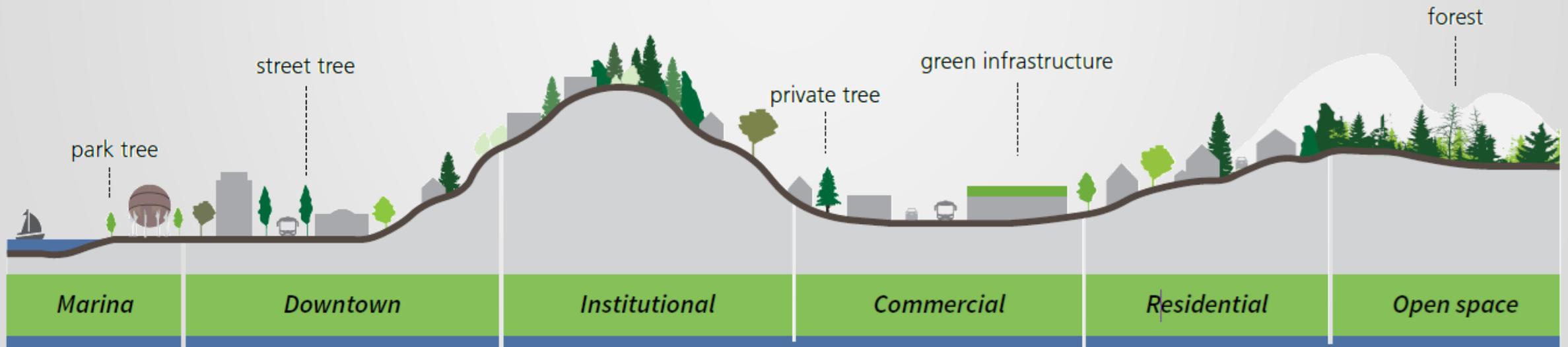


# Project overview

# What is the urban forest?

*“All trees, vegetation, soils, associated natural processes, and cultural elements, found in towns, cities, and other communities where people reside.”*

## Components of Bellingham’s urban forest



# Trees in Bellingham

- Comprehensive Plan
- Tree City USA community recognized nationally
- Habitat Restoration Technical Assessment
- Wildlife Corridor Analysis
- PRO Plan
- Land Clearing Chapter (BMC 16.60)
- Critical Areas Ordinance (BMC 16.55)
- Shoreline Master Program(BMC Title 22)
- Park Policy (PAR 06.00.01)
- Climate Protection Action Plan
- Natural Hazard Mitigation Plan
- Street Tree Inventory



# Trees in Bellingham

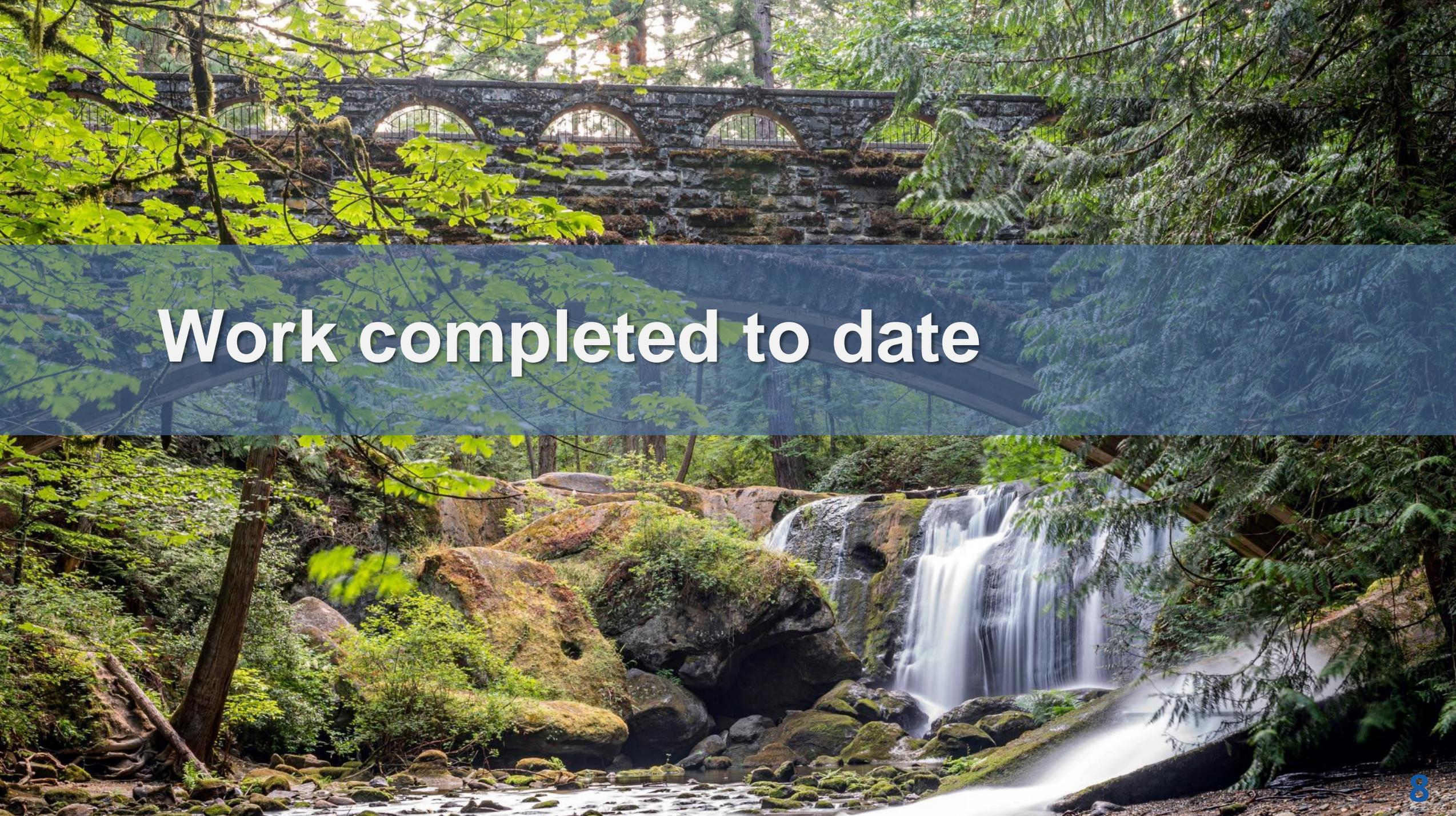


*“The City’s urban forest should be managed in a way that optimizes the environmental, economic and social benefits it provides. An **urban forestry management plan** is the best tool for maintaining a healthy and desirable urban forest.” - **City of Bellingham Comprehensive Plan***



# Purpose

Create a strategic plan that helps maintain a healthy and desirable urban forest through well-coordinated, consistent, efficient, and sustainable long-term urban forestry management.



**Work completed to date**

# Study Area

- City boundary
- Urban growth areas
- Public and private property



# Scope of Work and Timeline

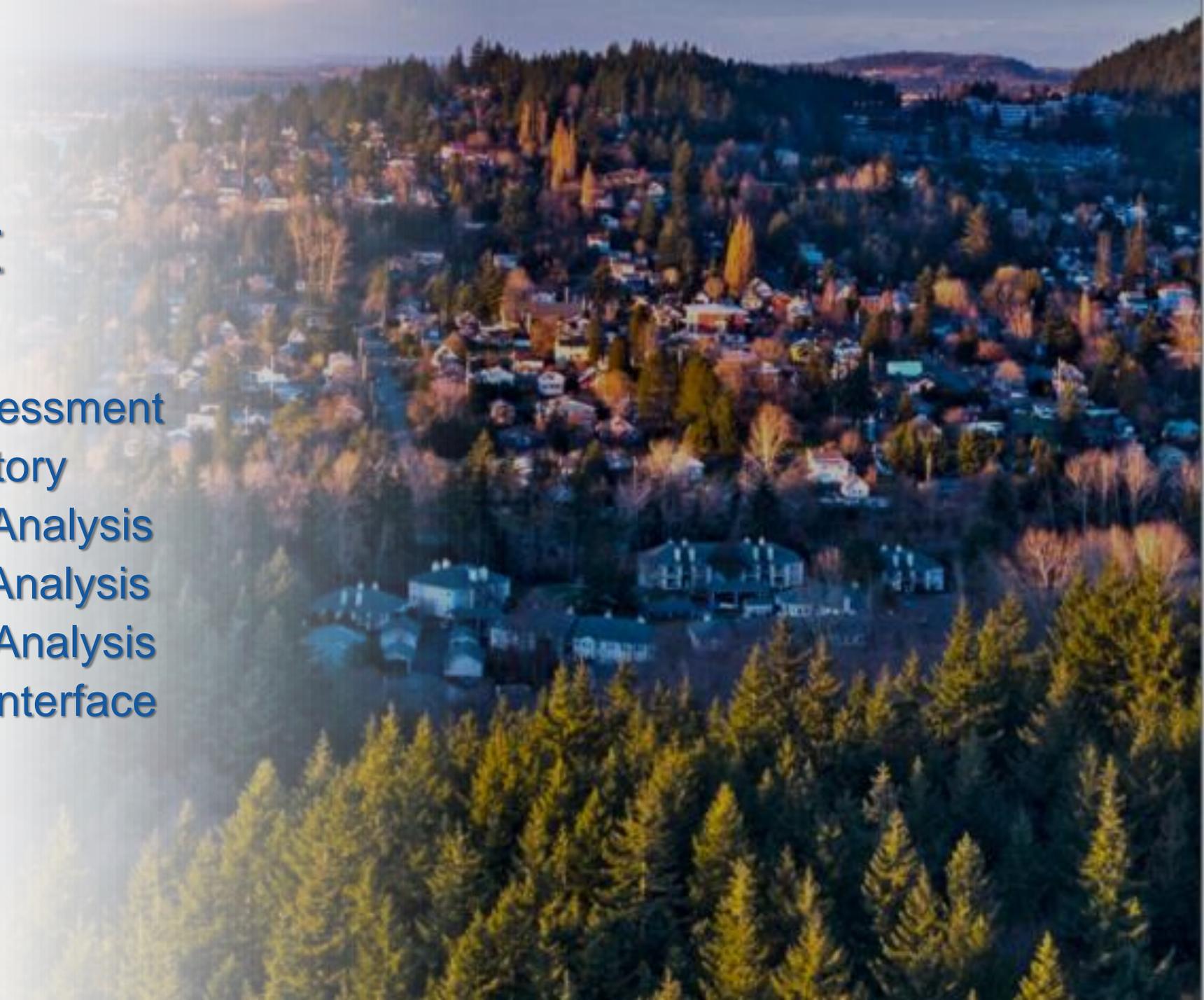


## Two rounds of engagement

- Phase 2 – spring 2022
- Phase 3 – 2023 on draft UFMP

# Phase 1: Assessment

- Tree Canopy Assessment
- Street Tree Inventory
- Canopy Change Analysis
- Forest Structure Analysis
- Wildlife Corridor Analysis
- Wildland-Urban Interface



# Canopy cover comparisons



**BELLINGHAM**



CITY

CANOPY COVER

CITY

CANOPY COVER

**ABBOTSFORD, BC**



**RENTON**



**BELLEVUE**



**SAMMAMISH**



**KENT**



**SEATTLE**



**KIRKLAND**

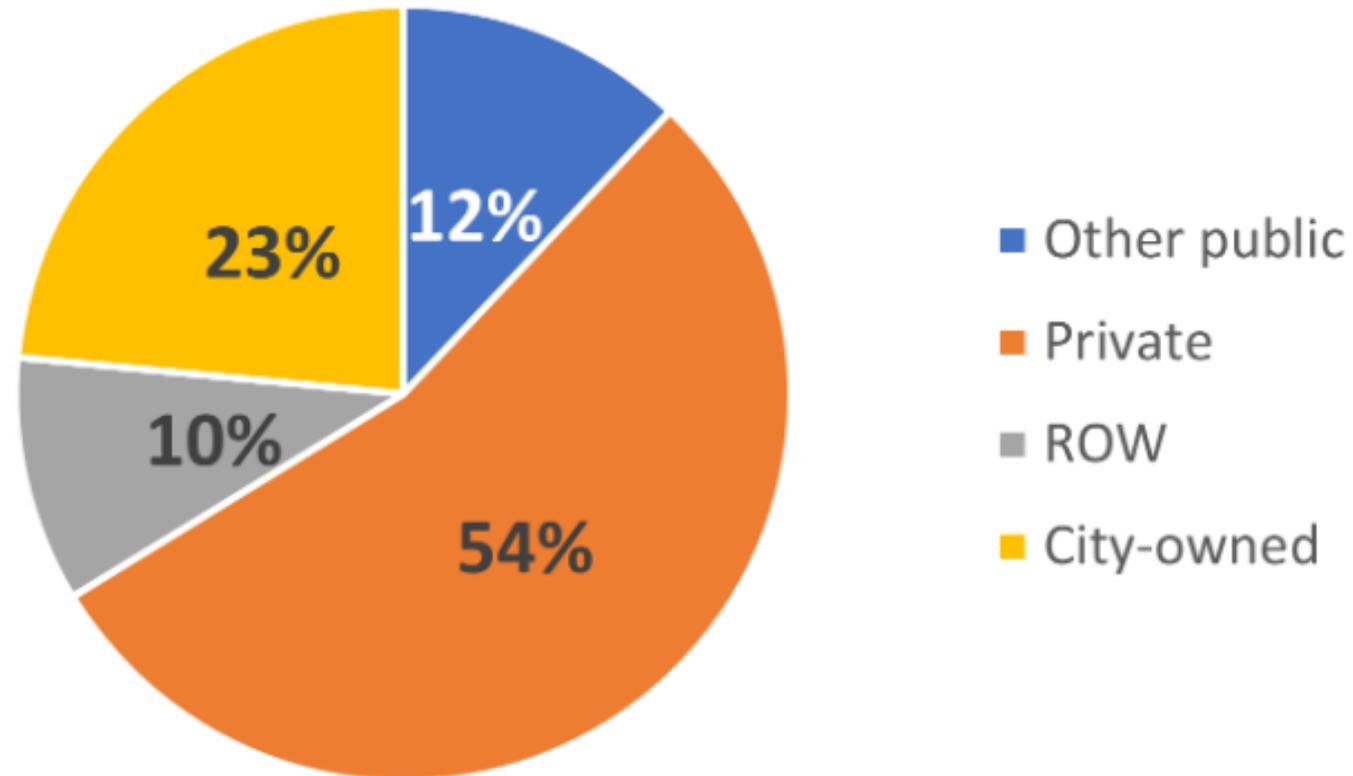


**VANCOUVER, WA**



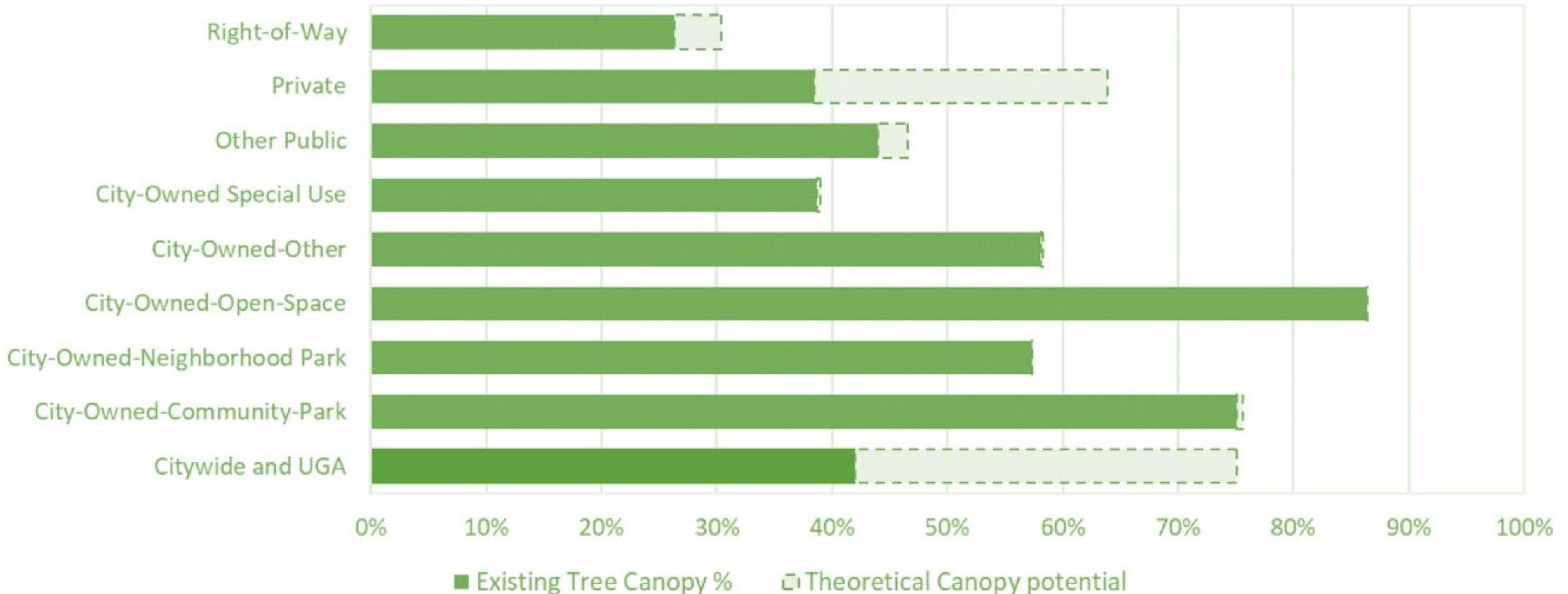
# Phase 1: Results

- The majority of existing tree canopy is on private land, City parks and City open space.



# Phase 1: Results

- The majority of tree canopy potential growth is on private land, followed by ROW.



# Phase 1: Results

- Bellingham has an overall Tree Equity Score of 89, high compared to comparable Washington State municipalities.

Comparable Washington State Municipality	Tree Equity Score <i>(0-100)</i>	Population size	Land area <i>(sq. miles)</i>
<b>Bellingham</b>	<b>89</b>	<b>91,482</b>	<b>27</b>
Auburn	76	87,256	30
Bothell	79	48,161	14
Vancouver	78	190,915	49
Kent	78	136,588	34
Bellevue	80	151,854	34

# Phase 2: Community Values

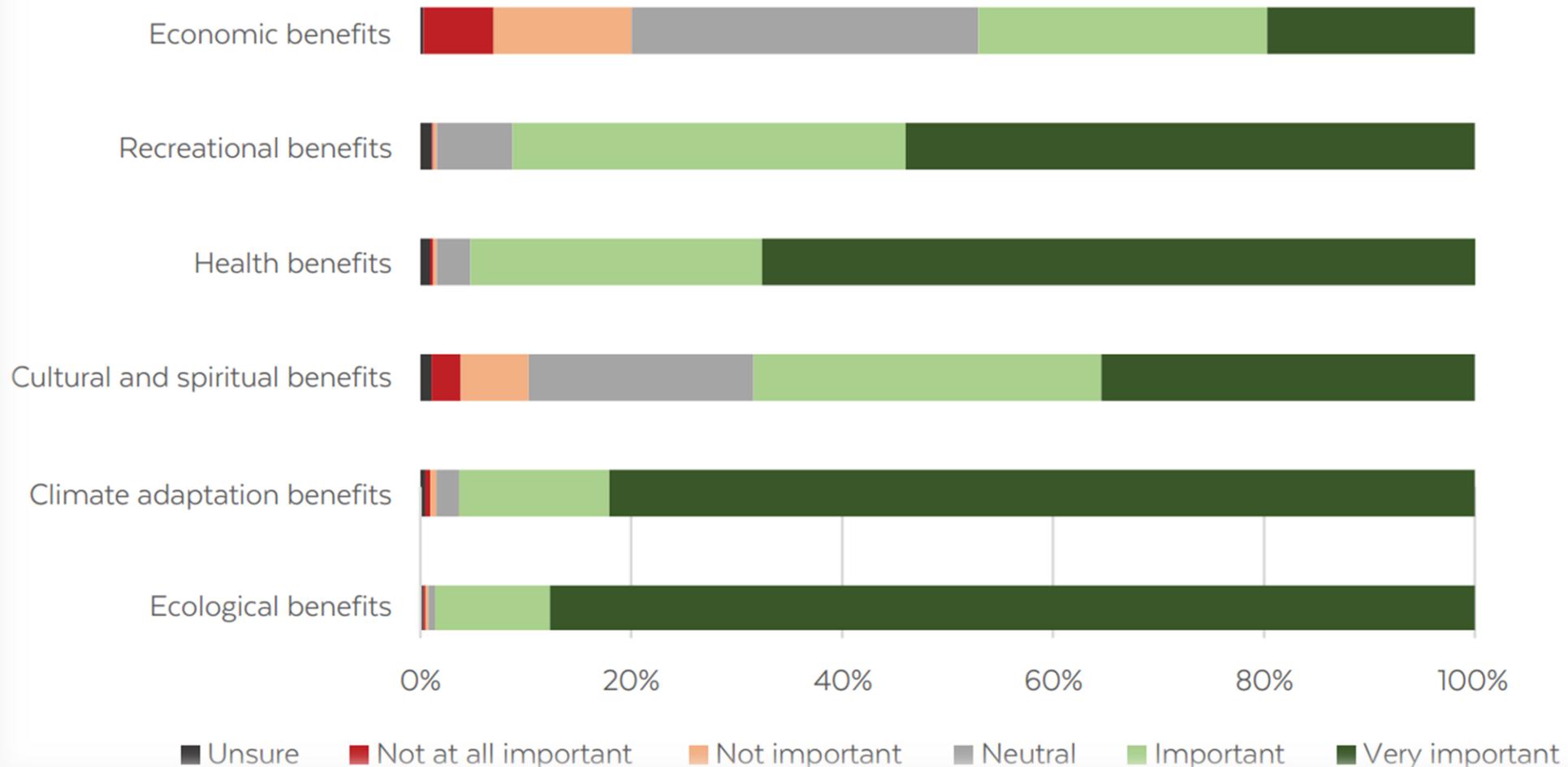
## Engagement Opportunities

- Online reports, maps, videos
- Engage Bellingham
  - Mapping Tool
  - Survey
  - Stories
- 2 Open Houses
- 2 Technical Workshops
- 5 Targeted Listening Sessions and Comment Booths



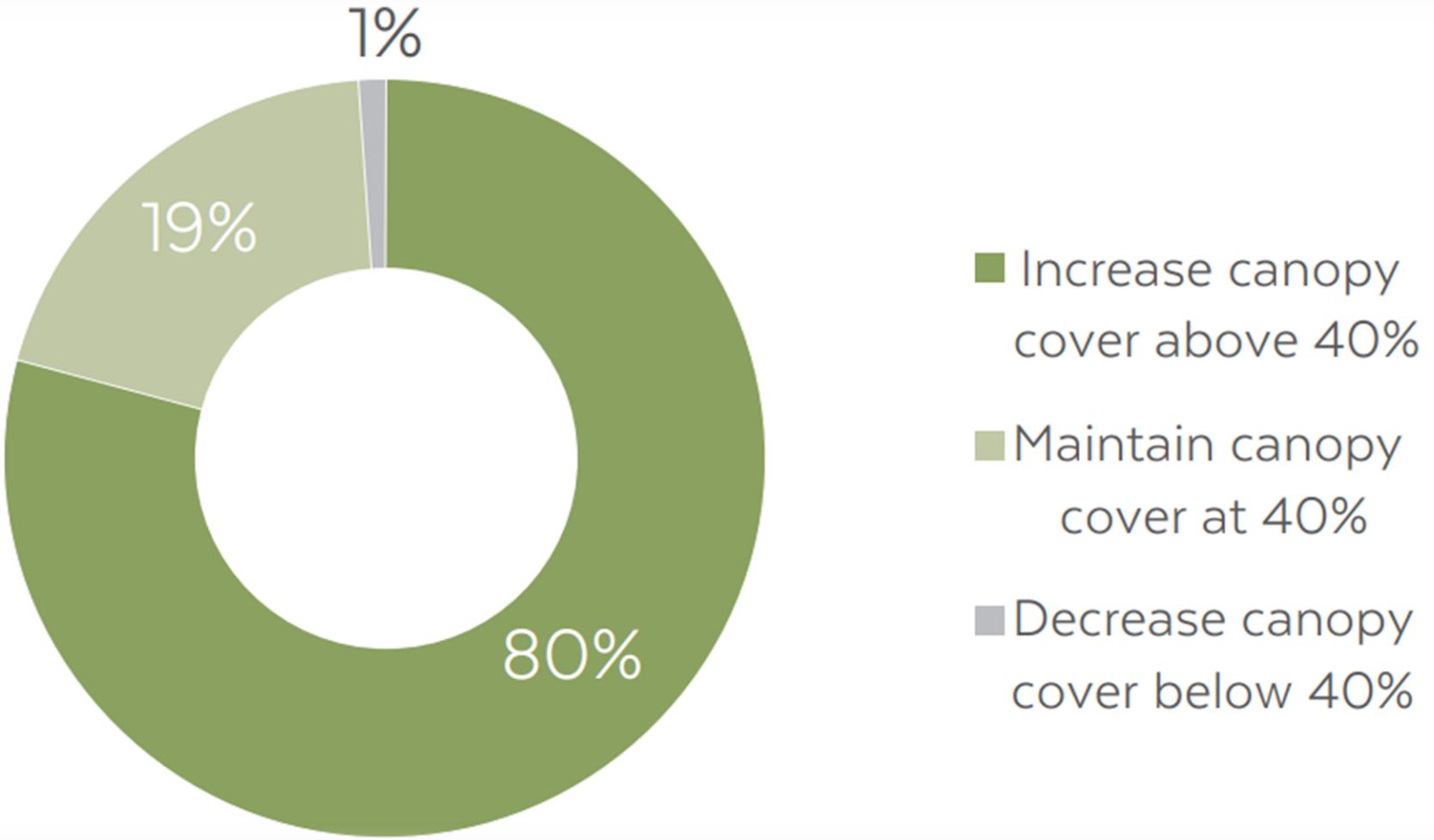
# Phase 2 – key survey results

- Majority of survey respondents indicated they value the urban forest primarily for its ecological, climate and health benefits



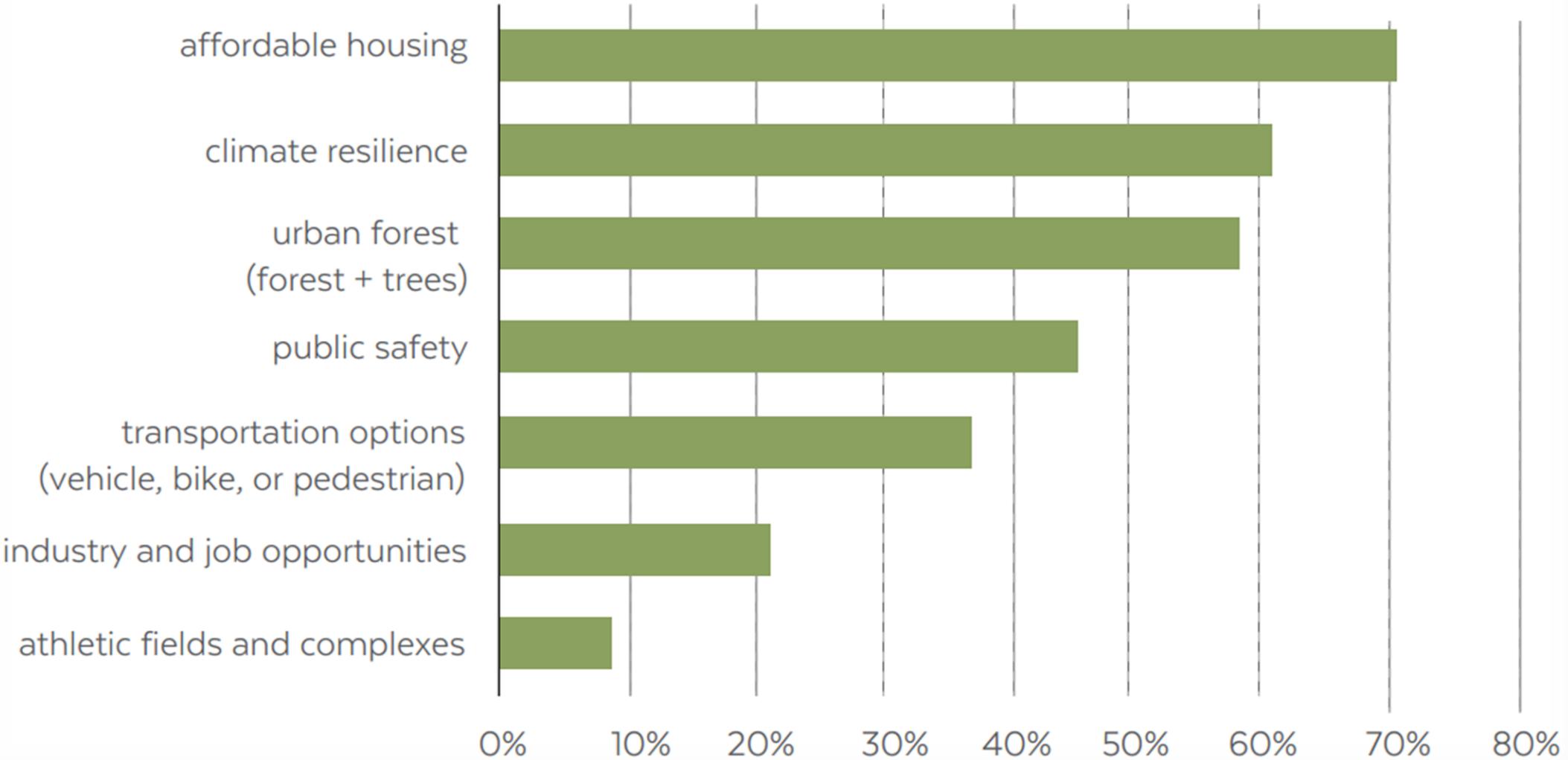
# Phase 2 – key survey results

- 80% of survey respondents envisioned increased canopy cover in the City of Bellingham



# Phase 2 – key survey results

- 58% of survey respondents ranked urban forest in the top three when provided a list of potential priorities



# Phase 3

## Plan Development

- Review policies, programs, practices
- Review existing codes
- Develop Vision, Goals, Strategies



# Vision

An aerial photograph of a vast forested area. The foreground and middle ground are filled with dense trees, some showing autumn colors like yellow and orange, while others are green. In the far distance, a city skyline is visible under a bright, cloudy sky. The overall scene is a mix of natural greenery and urban development.

Bellingham's healthy and resilient urban forest enhances the quality of life for all residents, supports associated ecological functions, and contributes to the climate mitigation and adaptation needs of our entire community

# Goals



**A. Protect and expand the urban forest in alignment with community values**



**B. Protect and restore priority habitat area and movement corridors, and forest in parks**



**C. Manage the urban forest in alignment with best practices to support healthy and safe trees**



**D. Adapt the urban forest for climate change resilience**



**E. Collaborate with diverse people and organizations in urban forest management**



**F. Monitor performance, adapt strategies**

# Goals



## Goal A: Protect and expand the urban forest in alignment with community values

### Strategies:

- Improve policy, regulations and processes guiding tree protection and planting, including protection of individual, valued trees
- Develop urban forest design guidelines and improve standards for planting sites and right tree, right place
- Expand the urban forest, prioritizing areas with low tree equity and high impervious cover

# Goals



**Goal B: Protect and restore priority habitat area and movement corridors, and forest in parks**

## **Strategies:**

- Protect and expand priority habitat areas and movement corridors, and forest in parks
- Restore priority habitat areas and movement corridors, and forest in parks

# Goals



**Goal C: Manage the urban forest in alignment with best practices to support healthy and safe trees**

## **Strategies:**

- Establish a sustainable urban forestry program aligned with best practices
- Establish asset management systems for urban forestry

# Goals



## Goal D: Adapt the urban forest for climate change resilience

### Strategies:

- Increase resilience in the urban forest population
- Prepare for disturbance events
- Align urban forest management with City climate adaptation and stormwater management initiatives

# Goals



## Goal E: Collaborate with diverse people and organizations in urban forest management

### Strategies:

- Expand community education and involvement in urban forest management
- Strengthen relationships with Native American Tribes and urban Indigenous people

# Goals



## Goal F: Monitor performance, adapt strategies

### Strategies:

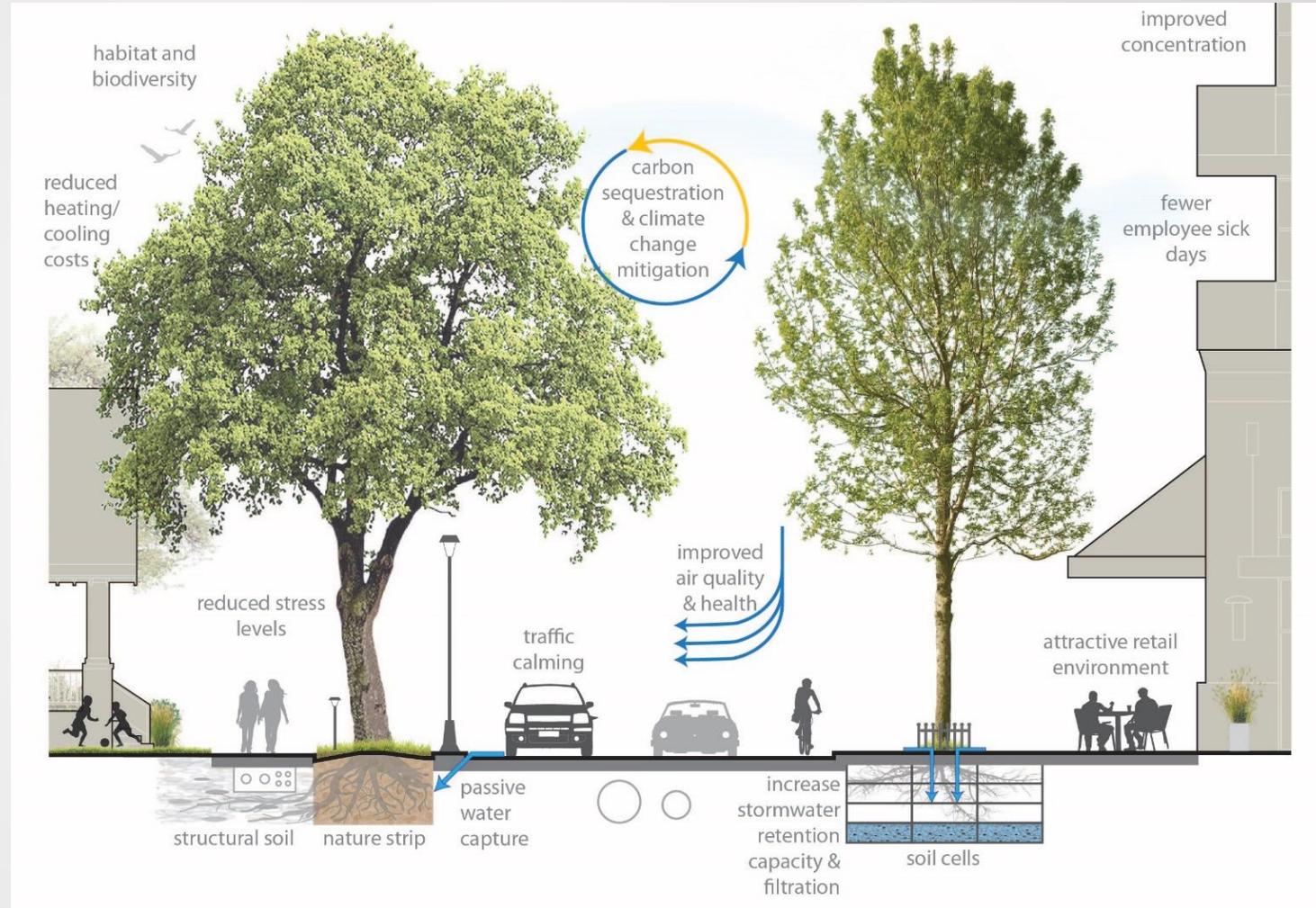
- Monitor performance on plan implementation
- Monitor and research change in the urban forest



# Benefits and challenges

# Benefits

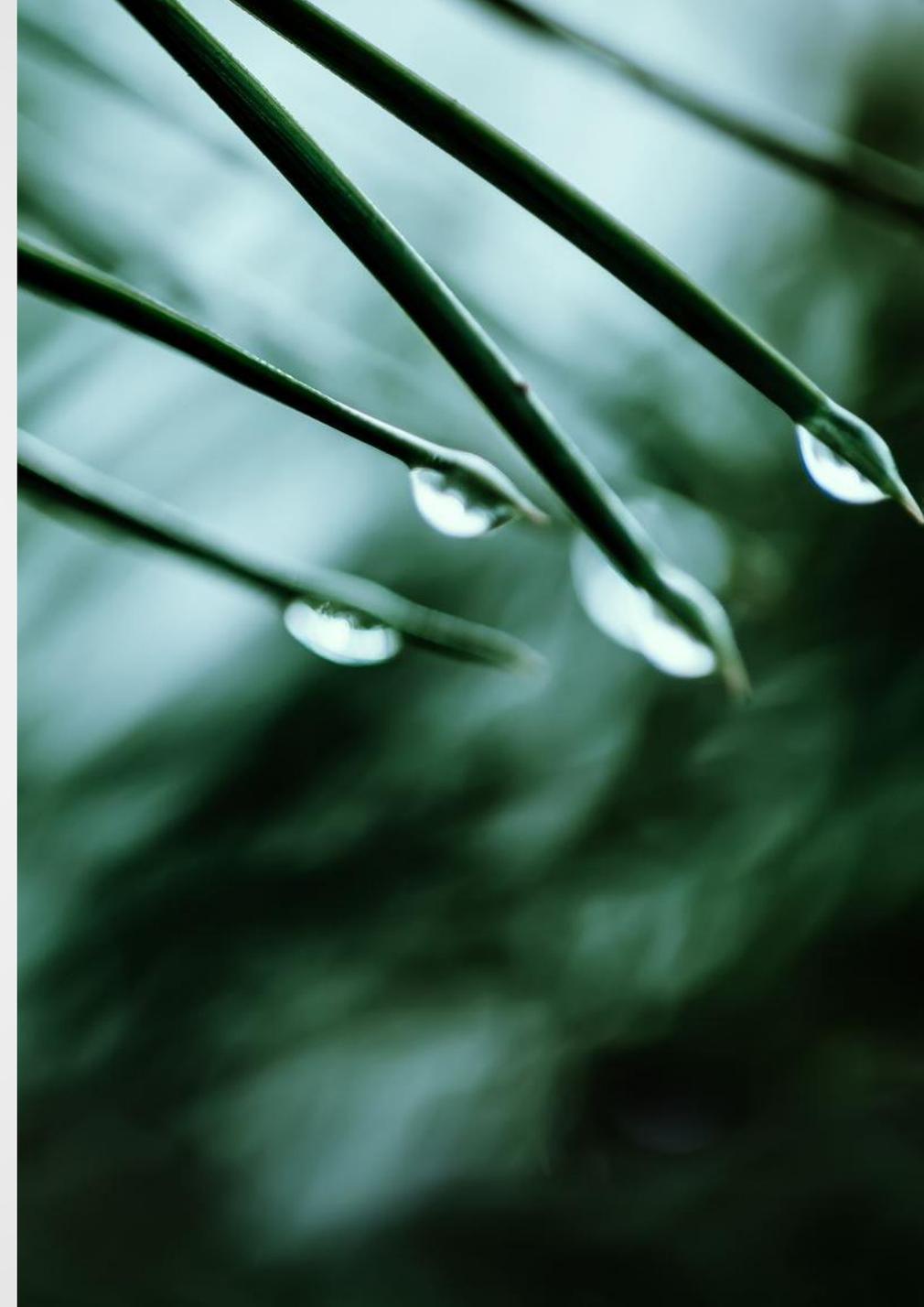
- Human health & well being
- GHG reductions
- Climate regulation
- Biodiversity and habitat
- Environmental quality
- Urban quality of life
- Connections to nature
- Culture & heritage



# Benefits

- Forests improve the quality of stormwater entering streams, rivers, and groundwater
- Studies have shown that forests can intercept and evaporate up to 40% of annual rainfall\*
- Trees and vegetation can reduce peak water flows during storms, reducing the strain on grey stormwater infrastructure

\*<https://www.nature.com/articles/s41598-023-28629-6>



# Benefits

Ecosystem service	Value (USD, 2022)	Amount
Carbon stored in trees	\$42,399,626	248.61 kT
Carbon sequestered annually in trees	\$1,423,587	8.35 kT
Total air pollution removed annually	\$2,964,408	302.37 T
Annual avoided runoff	\$1,924,401	215.93 Mgal
Total annual benefits	\$6,312,395	
<b>Total benefits</b>	<b>\$48,712,020</b>	

# Challenges

- Housing affordability/land value
- Inequitable canopy distribution
- Climate change
- Increasing demand for urban forest benefits
- Infrastructure issues
- Solar access and views



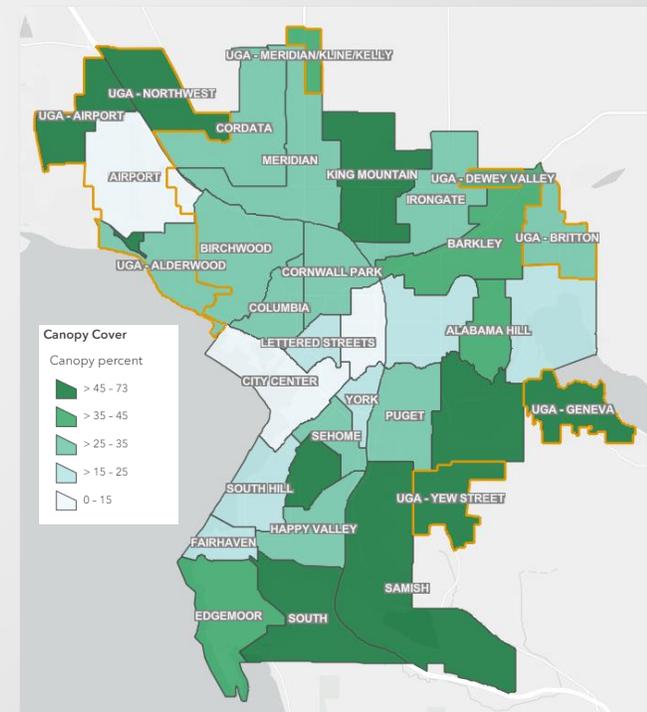
# Finding Balance

HB 1220 requires Bellingham to plan for about 16,000 more housing units over the next 20 years. Over 60% of these will need to be affordable to households at or below 80% of median income.



Housing  
Cost-Burden

Tree Equity  
Score



# Focusing on the Big Picture

- State and local policies direct us to focus growth into cities and urban growth areas and to plan for and accommodate housing for all income levels.
- Requires balancing competing priorities so that we may strive to achieve regional housing, climate mitigation, **AND** forest management goals.

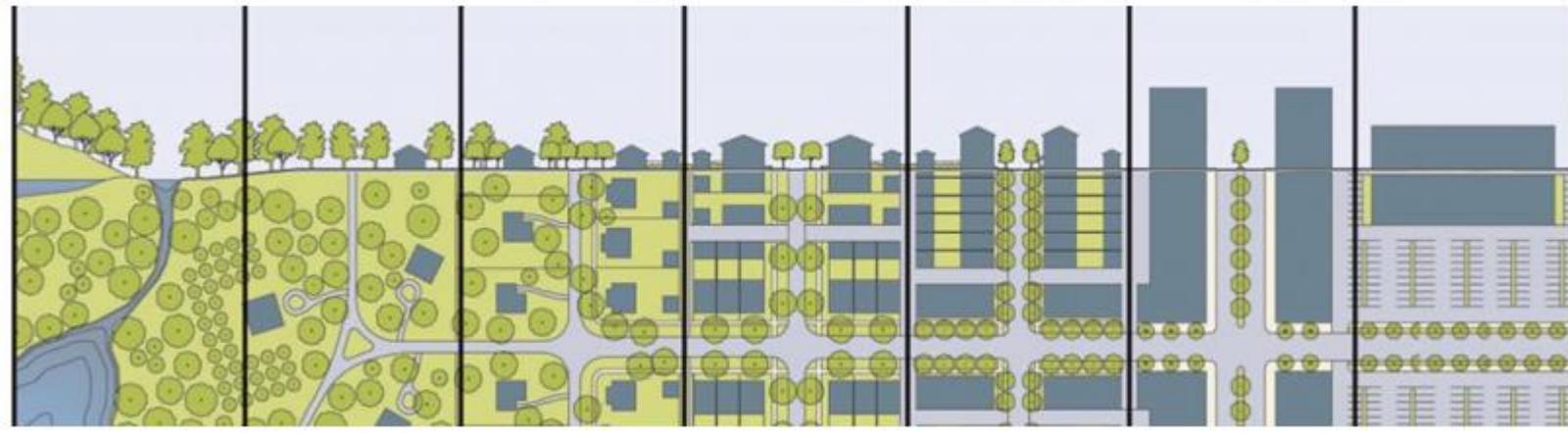


Image Courtesy – Congress for the New Urbanism



# Results from Phases 1 and 2 are informing Phase 3



## Urban Forestry Management Plan

The City of Bellingham is creating an Urban Forestry Management Plan (UFMP). The purpose of the UFMP is to create a strategic plan that helps maintain a healthy and desirable urban forest through well-coordinated, consistent, efficient, and sustainable long-term urban forest management. See below to learn more about Bellingham's urban forest.

### Project Status

**Phase 3 (Plan Development) is underway.**

Phase 2 (Community Values) concluded in 2022. The City is in the process of preparing a draft Urban Forestry Management Plan using the input received in Phase 2. There will be opportunities for community feedback on the draft plan before it is finalized and presented to City Council. We expect Phase 3 to continue into 2024. Please [sign up to receive email updates](#) about the UFMP process and feedback opportunities.

# Questions?

Public Works Department  
Planning and Community Development Department  
Parks and Recreation Department  
Fire Department

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