

Prepared by: Seattle Office of Sustainability & Environment, City Budget Office, and Urban Forestry Core Team

Table of Contents

Background	2
Purpose of this report	2
Urban forestry context	2
Urban Forest Management Structure	3
Urban Forestry Investments	5
Budget Context	5
Citywide Urban Forestry Expenditures	6
Citywide Trends	8
Expenditures by Activity type	8
Activity: Direct management	8
Activity: Policy and Planning	13
Activity: Community Engagement	17
Gaps and Challenges	21
Resource Gaps	21
Climate Change Challenges	22
Conclusion	23

Background

Purpose of this report

This report responds to <u>SLI OSE-301-A-002-2023</u>, passed by the Seattle City Council in 2022, **requesting the Office of Sustainability & Environment (OSE) to work with the City Budget Office (CBO) and the urban forestry core team to develop a report on the City's funding and expenditures for tree planting, stewardship, and other related activities.** This report includes funding and expenditures by department for urban forest work in the categories of direct management, planning and policy, and community engagement. Expenditures are included for the years 2021 to 2023. 2024 data is based on the <u>2024 endorsed budget</u>, adopted by City Council and signed by the Mayor in Fall 2023. Additionally, as requested in the SLI, the report discusses current challenges and gaps, plans for utilizing this baseline expenditure information to provide biannual reporting moving forward, and areas where additional funding is needed so that the City can successfully implement the actions described in Seattle's <u>2020 Urban Forest Management Plan</u> (UFMP).

Urban forestry context

Trees are a critical part of Seattle's infrastructure and fundamental to the character and quality of life in our growing city. Our urban forest is a valuable asset that provides ecological, economic, and social benefits: it supports public health, provides habitat for wildlife, sequesters carbon and absorbs pollution, helps manage stormwater, and provides spaces for exploration and enjoyment. These wide-ranging benefits help meet the City's health, equity, and climate resilience goals. Importantly, trees increase resilience and help our communities adapt to a changing climate by helping to mitigate extreme heat.

The recently released 2021 <u>canopy cover assessment</u> results showed us that we are losing canopy, indicating that the City's investments between 2016 and 2021 were not enough to overcome the challenges facing the urban forest. Climate change is straining our resources, as hotter and drier summers increase watering and maintenance needs and increase pest and disease susceptibility.

The UFMP is the City's guiding plan for managing the urban forest, proving strategies and actions to help us reverse the decline, gain back canopy and get on track toward achieving our goal of 30% canopy cover citywide, equitably distributed. Implementation of the plan is carried out through investments in staff and operating budgets to actively manage, plan for, and regulate the urban forest and engage residents in caring for and managing urban trees.

Residents, businesses private landowners, non-City governments and institutions, and several City departments each play a role in caring for and managing the city's trees and forests across public lands, private lands and the right of way (ROW). The City's role in managing the urban forest includes three primary types of work, which will be the focus of this report:

- Direct management of the urban forest includes caring for existing trees as well as planting and establishing new trees.
- Policy and planning includes development and implementation of policy and regulations protecting
 trees and the urban forest, citywide plans affecting the regulatory and physical landscape for trees,
 and policy, planning and analysis work at the department or landscape scale.
- Community outreach includes providing education and support to residents on the value of trees
 and how to care for them, and engaging residents regarding the status of the urban forest in their
 neighborhoods and best plans for improving and increasing it.

Urban Forest Management Structure

Seattle uses an integrated model for managing our urban forest, with nine departments sharing responsibility for urban forest management. This allows for integration of urban forestry work with other department functions (e.g., tree trimming with maintenance of electrical grid infrastructure, aligning tree planting with road and sidewalk improvements, integration of tree permitting with building permitting). Cross-departmental coordination is facilitated through a Core Team, a Management Team, and an Interdepartmental Team. Figure 1 describes the roles of these cross-departmental coordination teams and the roles of each department.

Figures 1A and 1B. City of Seattle Urban Forestry Departments and Interdepartmental Teams

1.A. Interdepartmental Teams

Made up of staff from core urban forestry departments. Creates annual work plans to deliver on dentified priorities, provides technical input on urban forestry issues, implements citywide urban forestry projects, and provides rapid response to emerging situations.
Consists of department executive staff directly responsible for urban forestry practitioners from he seven core departments. Provides guidance based on a broad perspective of departmental priorities and elevates and supports Core Team urban forestry work; provides guidance on citywide urban forestry policy and programmatic recommendations.
cield staff from all nine departments with urban forestry mandates. Meetings include skills building; departmental coordination; providing additional perspective from on-the-ground field knowledge/experience; technical information sharing; and inter-departmental team building. Provides an inclusive forum for innovation and the opportunity for urban forestry practitioners o share ideas that can spark additional collaboration; share operational information to provide context around urban forestry challenges and opportunities and elevate issues to Core Team.
4S is the branding for citywide UF efforts; encompasses the coordinating structure as well as he communications umbrella. SPU houses the T4S team managing the work noted here. The communications umbrella for all the City's urban forestry efforts. Works to make the City's urban forestry work accessible and relevant to the public, particularly residents. Builds partnerships and strategies to grow and care for the urban forest on private property. Works across departments to manage the Trees for Neighborhoods and Seattle Tree Stewards projects, an interdepartmental urban forestry website, the City's urban forestry social media
de d

Figure 1.B Urban Forestry Departments

IDT	CT/ MT	Department	Responsibilities
		Seattle Department of Construction and Inspections (SDCI)	Regulatory: Development, permitting, and enforcement of regulations for trees on private property both during and outside of the development process, including tree protection, landscaping, environmentally critical areas, and nuisance requirements.
	Office of Planning and Community Development (OPCD)		Policy: Stewards the City's Comprehensive Plan, which includes broad policy direction for managing the urban forest.
		Office of Sustainability and Environment (OSE)	Policy: Leads policy development and coordination for citywide urban forest issues: Facilitation of the UF Core Team and the UF IDT Staffing the Urban Forestry Commission Coordination of interdepartmental issues; reporting progress
			Updating the Urban Forest Management Plan
		Seattle City Light (SCL)	Ensures safe and reliable power delivery through comprehensive and environmentally responsible management of the trees and vegetation that their lines and infrastructure impact.
			 Maintains an Urban Tree Replacement Program that works closely with the City's Trees for Seattle program and its Trees for Neighborhoods program.
			Challenged by many inappropriately sized trees that grow into utility lines.
		Seattle Department of	Operations/Regulatory:
		Transportation (SDOT)	 Management of trees in the right-of-way (street trees), including design, installation, and stewardship of trees and landscapes associated with public right-of-way and permitting of actions that could impact these trees.
			Maintains over 40,000 street trees and regulates planting and maintenance of another 200,000 street trees.
		Seattle Parks and	Must balance canopy cover goals with the need to minimize tree conflicts with surrounding infrastructure and transportation safety requirements.
			Operations
		Recreation (SPR)	Manages trees on more than 6,400 acres of developed parks, boulevards, natural areas, and other publicly owned open spaces.
			 Must balance a wide range of recreational goals including the desire for picnics, sports, and play areas. Community Engagement
			Green Seattle Partnership engages residents in efforts to restore the City's forested parklands; have been increasing their efforts to engage youth in job training and leadership development opportunities.
		Seattle Public Utilities	Operations
		(SPU)	Maintains trees on the property it owns, and actively plants trees to meet drainage, capital project, and riparian habitat needs. Community Engagement
			Supports several programs that promote healthy urban forests including the City's Trees for Seattle program, Green Seattle Partnership, and Green Stormwater Infrastructure program.
		Dept. of Finance and Administrative Services (FAS)	Operations: Manages trees on non-right-of-way properties and facilities owned or leased by the City.
		Seattle Center	Operations:
			 Manages trees on its 74-acre campus, as it hosts hundreds of events and festivals each year. Maintains a balance between ensuring tree health and public programming and use of the grounds.

Urban Forestry Investments

Budget Context

The City of Seattle's 2023 Adopted Budget includes \$7.4 billion in overall appropriations and \$1.6 billion in General Fund appropriations. Urban forestry is a key piece of the City's work to maintain a healthy, livable, vibrant city, and urban forestry is budgeted in nine City departments (see above, Urban Forest Management Structure). Urban forestry work is funded through a variety of sources, including General Fund, the Municipal Parks District, Move Seattle Levy, real estate excise tax, and City Light Fund, among others. While not included in this report due to the timing of report preparation, the Mayor's 2024 mid-biennial budget adjustment includes appropriations associated with anticipated payment in lieu of tree replacement fees (\$132,000 for SDOT and \$59,000 for Parks).

In 2023, the City is anticipated to invest \$23.5 million in urban forestry. For the purposes of this report, urban forestry work is defined as those efforts (planting, maintenance, care and protection) supporting trees and canopy directly, as well as efforts supporting landscapes associated with and that support trees and the tree canopy indirectly. This can include some treed landscapes with understory and other associated vegetation, such as riparian corridors and natural areas. This does not include maintenance of larger, non-tree landscapes such as playfields and lawn areas in developed parks, and does not include green stormwater infrastructure projects or work done in the watershed areas outside of the city. This section describes the total expenditures in all aspects of urban forestry work across nine urban forestry departments.

As requested in the SLI, finance managers in each department reported their actual and projected expenditures during a several year period to show trends; the expenditures reported cover the years 2021-2024. For most departments, these represent actual expenditures or estimates of actual expenditures for 2021-22 and anticipated expenditures for 2023. For Seattle Parks and Recreation and Seattle Center, the amounts represent adopted budget amounts. Across all departments, 2024 reported amounts are from the 2024 Endorsed Budget. It is important to note here the distinction between **budgets** and **expenditures**, and some resulting caveats that inform interpretation of the data.

- Budgets are set by City Council each year and adopted by ordinance. Changes to budgets year over year represent either inflationary adjustments or policy changes.
- Expenditures, on the other hand, represent actual spending by departments. These may change year
 over year due to mid-year budget guidance (such as guidance during the pandemic to underspend
 budgets, which was the case for some departments in 2021 and 2022) or by factors influencing the
 work (such as a delay in a contracted expenditure due to an unforeseen obstacle). These year-overyear fluctuations were exacerbated during the covid pandemic, which continues to impact the
 economy.
- Unlike budget changes, year over year expenditure changes may not reflect policy changes but
 may instead be a reflection of external short-term factors. For this reason, some caution is
 recommended in interpreting year over year trends, especially given fiscal impacts of the
 pandemic that took place over the duration of this report.

Citywide Urban Forestry Expenditures

Expenditures in Urban Forestry fall generally into one of three <u>categories</u>: personnel, operations, and contracts. A brief description of the types of expenditures that fall into each category is included below.

- **Personnel** includes expenses related to personnel who work on urban forestry efforts, either as the whole focus of their work or as a part of their job duties.
- **Operations** includes expenses related to resources needed for staff to carry out urban forestry work, such as equipment, supplies, water and fleets.
- **Contracts** departments often contract with companies or organizations to carry out portions of their urban forestry work plans, including contracts for tree trimming and other tree maintenance, watering, natural area restoration, specialized analysis, and community engagement.

In this report, we also divide expenditures by three types of urban forestry work: direct management, policy and planning, and community outreach. A brief description of these **activity types** is included below.

- Direct management of the urban forest includes caring for existing trees with activities such as
 pruning, mulching, and weeding as well as planting new trees and associated activities to set trees up
 for success such as site preparation and soil amendment.
- Policy and planning includes development of policy and regulations protecting trees and the urban forest, citywide plans affecting the regulatory and physical landscape for trees, and policy, planning and analysis work at the department or landscape scale.
- **Community outreach** includes providing education and support to residents on the value of trees and how to care for them, and engaging residents regarding the status of the urban forest in their neighborhoods and best plans for improving and increasing it.

Urban forestry expenditures by category (all departments)¹

Category	2021 (expenditures)	2022 (expenditures)	2023 (anticipated expenditures)	2024 (Endorsed budget)
Personnel	\$9,044,699	\$9,679,695	\$10,094,914	\$11,010,985
Operations	\$2,465,942	\$2,473,724	\$2,633,897	\$3,149,226
Contracts	\$9,168,285	\$9,284,636	\$10,809,694	\$11,224,938
Total	\$20,678,926	\$21,438,055	\$23,538,505	\$25,385,149

¹ For most departments, expenditure amounts represent actual expenditures or estimates of actual expenditures for 2021-22 and anticipated actual expenditures for 2023. For Seattle Parks and Recreation and Seattle Center the amounts represent adopted budget amounts. Across all departments, 2024 reported amounts are from the endorsed 2024 budget. Caution is recommended in interpreting year-over-year trends, as expenditures were influenced by fiscal impacts of the pandemic that took place over the duration of this report, and that were unrelated to urban forestry policy direction (see Budget Context).

Urban forestry expenditures by activity type (all departments)¹

Activity Type	2021 (expenditures)	2022 (expenditures)	2023 (anticipated expenditures)	2024 (endorsed)
Direct management	\$17,487,678	\$17,497,804	\$18,963,988	\$20,268,633
Policy and planning	\$1,827,768	\$2,280,368	\$2,501,371	\$2,974,051
Community engagement	\$1,353,980	\$1,659,883	\$2,073,146	\$2,142465
Total	\$20,678,926	\$21,438,055	\$23,538,505	\$25,385,149

Throughout the report, expenditures are reported as follows, by department:

- Parks, OSE, Seattle Center: Adopted/Proposed budget amounts
- SDOT, SPU, SCL, SDCI, OPCD, FAS: Actuals or anticipated actuals
- * OPCD estimated expenditures are based on estimated base labor costs for existing staff
 Caution is recommended in interpreting year-over-year trends, as expenditures were influenced by fiscal impacts of the pandemic that

Caution is recommended in interpreting year-over-year trends, as expenditures were influenced by fiscal impacts of the pandemic that took place over the duration of this report, and that were unrelated to urban forestry policy direction (see Budget Context).

Urban forestry expenditures by department¹

Department	2021 (expenditures)	2022 (expenditures)	2023 (anticipated expenditures)	2024 (endorsed)
Seattle City Light	\$7,215,000	\$7,260,000	\$7,290,000	\$7,835,000
Department of Transportation	\$7,181,065	\$7,053,431	\$7,027,747	\$7,662,324
Parks and Recreation	\$4,410,929	\$4,497,032	\$6,265,054	\$6,537,238
Seattle Public Utilities	\$795,941	\$853,221	\$987,526	\$954,568
Department of Construction and Inspections	\$719,080	\$1,115,128	\$1,025,440	\$1,563,290
Office of Sustainability & Environment	\$223,283	\$516,094	\$800,393	\$683,128
Seattle Center	\$108,628	\$126,149	\$125,345	\$132,600
Office of Planning & Community Development*	\$18,000	\$10,000	\$10,000	\$10,000
Facilities and Administrative Services (FAS)	\$7,000	\$7,000	\$7,000	\$7,000
Total	\$20,678,926	\$21,438,055	\$23,538,505	\$25,385,149

¹ Throughout the report, expenditures are reported as follows, by department:

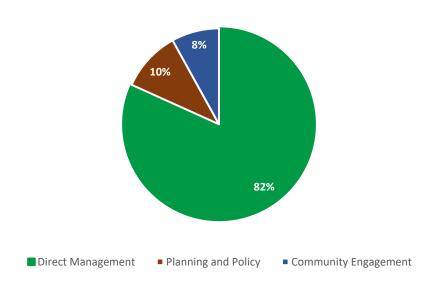
- Parks, OSE, Seattle Center: Adopted/Proposed budget amounts
- SDOT, SPU, SCL, SDCI, OPCD, FAS: Actuals or anticipated actuals
- * OPCD estimated expenditures are based on estimated base labor costs for existing staff

Caution is recommended in interpreting year-over-year trends, as expenditures were influenced by fiscal impacts of the pandemic that took place over the duration of this report, and that were unrelated to urban forestry policy direction (see Budget Context).

Citywide Trends

- Direct management comprises 82% of the City's urban forestry expenditures. By land area, 18% of Seattle's canopy is on City-owned land and another 23% on ROW. The percent of our urban forestry budget spent on direct management reflects the importance the City places on maintaining this green infrastructure and continuing to maximize utilization of City-owned land for new trees.
- Overall, based on the data received for this report, between 2021-2024, urban forestry expenditures across the City increased by 23%. Over the same period, the City's overall General Fund appropriations grew from \$1.61 billion to \$1.65 billion, or 2.75%. The City's total budget (which includes all non-General Fund spending) grew from \$6.6 billion to \$7.4 billion, or 11.2%.
- Despite this increase in investment over the 4-year period, the City still struggles with challenges affecting our canopy, and Seattle's <u>canopy</u> declined by 1.7% between 2016 and 2021.





Expenditures by Activity type

Activity: Direct management

Direct management of the urban forest includes caring for existing trees on City owned land with activities such as pruning, mulching, weeding, and planting new trees. This includes associated activities to set trees up for success such as site preparation and soil amendment.

Direct management of the urban forest is performed by City crews and City-managed contract crews and includes planting, management, and inventory of trees in various areas of the city as described below.

Park property – Seattle Parks and Recreation's (SPR) urban forestry crews manage trees in developed parks and natural areas. SPR's tree crew carry out technical arboriculture work to inspect and address hazard trees for public safety, like responding to tree failures or storm responses, including carrying out any other tree maintenance needs. SPR's tree planting crew plant trees in developed parks and carries out the stewardship of young tree care, maintenance and establishment. SPR's Green Seattle Partnership

team works with volunteers, contract crews and partner organizations to restore the health of the City's forested parklands. This includes improving conditions for existing trees in natural areas and establishment of additional trees.

- <u>Right of Way (ROW)</u> Seattle Department of Transportation cares for approximately 20% of the city's street trees and supports residents in understanding and carrying out their responsibilities in planting and caring for trees in their adjacent ROW areas.¹ Seattle City Light provides care and management of trees in parts of the ROW with powerlines and utility poles and engages residents in planting appropriate ROW trees in utility corridors.
- <u>City-owned Facilities</u> Seattle Center staff manage the trees within the Seattle Center campus, and Finance and Administrative Services staff manage trees on the grounds of City-owned buildings.
- <u>Utility Corridors and Properties</u> Seattle City Light and Seattle Public Utilities manage and establish trees
 as appropriate and necessary within utility corridors and on the grounds of other utility properties. While
 the utilities manage forests in utility-owned land both within and outside the city, this report only
 includes budget/costs related to the management of trees within Seattle boundaries.

Direct management activities by department

Location/Activity	Department	Annual Outcomes / measures / extent
Developed Parks and		 Maintain 3,000-4,000 trees per year (pruning, etc.) Each year, plant 100-400 new trees in developed parks.
Natural Areas Plant and manage trees	SPR	 Plant and establish at least 6,000-8,000 native tree seedlings per year in natural areas. Manage weeds in support of tree establishment on 300-400 acres of natural areas per year.
Transportation ROW Plant and manage trees	SDOT, SCL	 Perform maintenance on over 5,000 trees per year (pruning, etc.). Plant 300-400 trees per year in the right-of way. Water 3,000-5,000 trees per year.
City-owned facilities Plant and manage trees	Seattle Center, FAS	 Manage trees on the 74-acre Seattle Center campus. Manage trees at 120 City facilities.
Utility corridors and properties SCL, SPU Plant and manage trees		 Maintain trees along 300-400 miles of utility corridors each year. Maintain trees at 7,000 sites on utility property, ROW and private lands each year. Plant 100-300 trees per year

¹ If SDOT plants trees, for example as part of a street improvement project, they assume ownership and management of those trees (5 years of establishment and watering, and maintenance and pruning for the lifetime of the tree). For all other trees in the ROW, the adjacent property owner is responsible for management and maintenance.

Direct Management Budget information

Expenditures by category (direct management)¹

	2021 (expenditures)	2022 (expenditures)	2023 (anticipated expenditures)	2024 (endorsed)
Personnel*	\$6,459,068	\$6,978,458	\$7,135,094	\$7,575,188
Operations	\$2,431,280	\$2,138,435	\$2,371,619	\$2,698,695
Contracts**	\$8,597,330	\$8,380,911	\$9,457,275	\$9,994,750
Total	\$18,422,580	\$17,497,804	\$18,963,988	\$20,268,633

^{*}For departments whose staff work encompasses multiple activity types (SPR, SPU, SDOT, SCL), personnel allocations for each activity type are determined based on an estimated breakdown of percentages. For example: Seattle City Light has 17 total FTE with a personnel cost of \$1,155,000-\$1,250,000. For the purposes of this report, total personnel cost is split across the three activity types with the following assumptions: 80% direct management, 10% policy and planning, and 10% community engagement.

¹Throughout the report, expenditures are reported as follows, by department:

- Parks, OSE, Seattle Center: Adopted/Proposed budget amounts
- SDOT, SPU, SCL, SDCI, OPCD, FAS: Actuals or anticipated actuals
- * OPCD estimated expenditures are based on estimated base labor costs for existing staff

Caution is recommended in interpreting year-over-year trends, as expenditures were influenced by fiscal impacts of the pandemic that took place over the duration of this report, and that were unrelated to urban forestry policy direction (see Budget Context).

Expenditures by department (direct management)¹

	2021 (expenditures)	2022 (expenditures)	2023 (anticipated expenditures)	2024 (endorsed)
Seattle City Light	\$6,972,000	\$7,008,000	\$7,032,000	\$7,568,000
Department of Transportation	\$6,428,346	\$6,222,484	\$6,221,938	\$6,784,049
Parks and Recreation	\$3,615,119	\$3,684,759	\$5,115,378	\$5,358,526
Seattle Public Utilities	\$356,586	\$449,412	\$462,327	\$418,458
Department of Construction and Inspections	\$0	\$0	\$0	\$0
Office of Sustainability & Environment	\$0	\$0	\$0	\$0
Seattle Center	\$108,628	\$126,149	\$125,345	\$132,600
Office of Planning & Community Development	\$0	\$0	\$0	\$0
Facilities and Administrative Services	\$7,000	\$7,000	\$7,000	\$7,000
Total	\$17,487,678	\$17,497,804	\$18,963,988	\$20,268,633

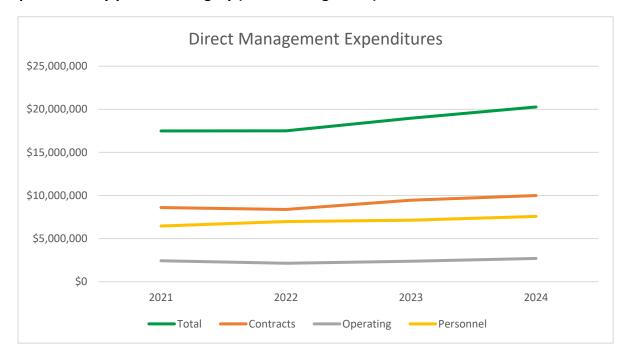
¹Throughout the report, expenditures are reported as follows, by department:

- Parks, OSE, Seattle Center: Adopted/Proposed budget amounts
- SDOT, SPU, SCL, SDCI, OPCD, FAS: Actuals or anticipated actuals
- * OPCD estimated expenditures are based on estimated base labor costs for existing staff

Caution is recommended in interpreting year-over-year trends, as expenditures were influenced by fiscal impacts of the pandemic that took place over the duration of this report, and that were unrelated to urban forestry policy direction (see Budget Context).

^{**}Contract allocations specific to GSP for direct management and community engagement activities are determined based on an estimated breakdown of 80% direct management and 20% community engagement via consultant contracts with partner organizations.

Expenditures by year and category (direct management)



Direct Management Trends

- Most direct management expenditures occur in the three departments that manage City owned trees across the city: SCL, SDOT, and SPR.
- Operations expenditures increased modestly over the four-year period due to a combination of inflation, responses to climate change, and policy shifts.
 - Inflation across the economy affected the cost of goods purchased to care for trees.
 - Hotter, drier summers caused by climate change have changed tree establishment practices, so departments have shifted from a 3- to a 5-year establishment period after planting to increase tree survival. This increases costs for trees planted. For example, SCL's budgeted water costs increased by 50% in the 2024 endorsed budget to account for a larger number of trees needing watering.
- Most expenditures in this category are for personnel, who plant, water, prune, and otherwise maintain City owned trees. Some departments also rely heavily on contract crews to perform tree maintenance (see below).
- The largest budget increases for direct management occurred in SPR. Starting in 2023, the Metropolitan Parks District funded five new positions at SPR, the creation of a new tree planting and 5-year stewardship program in developed parks, and restoration activities in partnership with community organizations to engage residents in restoration of forested parklands. The new positions include four maintenance laborers on the Urban Forestry team and one environmental analyst (see policy and planning section). Operations costs increased in alignment with this program growth.
- Non-SPR budget increases seen in the tables above are primarily due to fluctuations in expenditures, not
 policy changes. These fluctuations are due primarily to the covid pandemic and its residual effects. 2024
 endorsed budget amounts for these departments represent the baseline budgets and have been fairly
 consistent across the 2021-24 period (see SCL example below.)

- City departments utilize both contracted tree service providers and City staff in conducting tree
 management, planting, and maintenance work. Contracted service providers can bring specific skills
 outside the expertise of City staff and are able to complete work that is limited in duration. At the same
 time, departments rely on staff for their expertise and consistency of crew capacity to conduct the City's
 urban forestry work. Specialized contractors are used by SCL and SPR:
 - o For example, SCL relies entirely on contract labor to complete distribution line clearance tree work, in part due to the technical requirements of the work (e.g., arborists working anywhere near power lines need to have line clearance certification.) Roughly 85% of SCL's direct management budget is dedicated to distribution tree trimming contracts. The labor supply of qualified Line Clearance Qualified Tree Workers was constrained in 2022-23 and limited SCL's ability to fully expend its budget for distribution line clearance. This explains the difference in actual expenditures in 2022/2023 compared with the endorsed budget amount for 2024. SCL has been working closely with contractors and does not anticipate a similar constraint in 2024.
 - SPR utilizes contracts for Green Seattle Partnership restoration crew work and community engagement. They also use contracts for capital-funded tree replacement and emergency tree repair work.

Activity: Policy and Planning

Policy and planning work includes development of policy and regulations protecting trees and the urban forest as well as citywide plans affecting the regulatory and physical landscape for trees. There are citywide policies that affect what happens with the urban forest at the larger scale such as the One Seattle Comprehensive Plan directing where jobs and housing will go in the city, and the Tree Protection Ordinance that determines details of the City's tree code. There is also policy and planning work at the department or landscape scale, such as Seattle Parks and Recreation's development of and updates to their Tree Policy and Native Plant Policy, and planning where and how to add new SDOT-managed trees in the right of way.

Policy and Planning Activities by Department

Activity	Depart ment	Recent Highlights
Develop, implement, and enforce tree regulations on private property.	SDCI	 SDCI code development, land use and code enforcement staff were involved in updating the tree protection code, including stakeholder engagement, community outreach, analysis, and planning. SDCI enforces the tree protection code by reviewing development permit applications and reviewing and acting on code compliance issues.
Provide input on and review citywide policy related to the urban forest; implement planning-related projects such as updating the Urban Forest Management Plan (UFMP).	Urban Forestry Core Team	Between 2018 and 2020, the Core Team engaged with community, stakeholders, and other staff teams to update the UFMP, resulting in an updated set of outcomes and strategies and associated action agenda to ensure the City is working toward our canopy cover goals.
Policy and planning work to protect and grow canopy in the City's parklands.	SPR	 SPR updated their <u>Tree Policy</u> in 2022. On an annual basis, SPR conducts planning for new tree planting and maintenance necessary to comply with the City's replacement requirements and to protect and grow canopy in parklands.
Lead policy development, coordination, and reporting for citywide urban forestry issues and initiatives.	OSE	In 2021-22 OSE implemented the project to update the City's Canopy Cover Assessment, resulting in an updated understanding of the extent and distribution of the urban forest and the first canopy trend analysis, showing the city's canopy is declining and informing policy and planning work.
Steward the City's Comprehensive Plan, which includes broad policy direction for managing the urban forest. Create broad policies for management of Seattle's urban forest.	OPCD	OPCD is currently in the process of developing an update to the Comprehensive Plan, including extensive community and stakeholder engagement and analysis of planning approaches.
Planning and policy work to protect and grow canopy on SPU-owned lands, and to manage the Trees for Neighborhoods program.	SPU	 On an annual basis, SPU conducts planning for new tree planting and maintenance necessary to comply with the City's replacement requirements and to protect and grow canopy on SPU-owned lands. Trees for Neighborhoods program staff update policies guiding program implementation on an ongoing basis.
Policy and planning work to determine strategies for increasing canopy in the right of way (ROW).	SDOT	 Determine where and how to add new SDOT-managed trees to the ROW. Develop best management practices for street tree survivability.

Policy and Planning Budget information

Expenditures by category (policy and planning)1

	2021 (expenditures)	2022 (expenditures)	2023 (anticipated expenditures)	2024 (endorsed)
Personnel*	\$1,827,768	\$1,924,470	\$2,111,324	\$2,551,927
Operations	\$9,500	\$316,898	\$240,048	\$422,124
Contracts	\$0	\$39,000	\$150,000	\$0
Total	\$1,837,268	\$2,280,368	\$2,501,372	\$2,947,051

^{*}For departments whose staff work encompasses multiple activity types (SPR, SPU, SDOT, SCL), personnel allocations for each activity type are determined based on an estimated breakdown of percentages. For example: Seattle City Light has 17 total FTE with a cost of \$1,155,000-\$1,250,000. For the purposes of this report, that total staff cost is split across the three activity types with the following assumptions: 80% direct management, 10% policy and planning, and 10% community engagement.

¹Throughout the report, expenditures are reported as follows, by department:

- Parks, OSE, Seattle Center: Adopted/Proposed budget amounts
- SDOT, SPU, SCL, SDCI, OPCD, FAS: Actuals or anticipated actuals
- * OPCD estimated expenditures are based on estimated base labor costs for existing staff

Caution is recommended in interpreting year-over-year trends, as expenditures were influenced by fiscal impacts of the pandemic that took place over the duration of this report, and that were unrelated to urban forestry policy direction (see Budget Context).

Expenditures by department (policy and planning)1

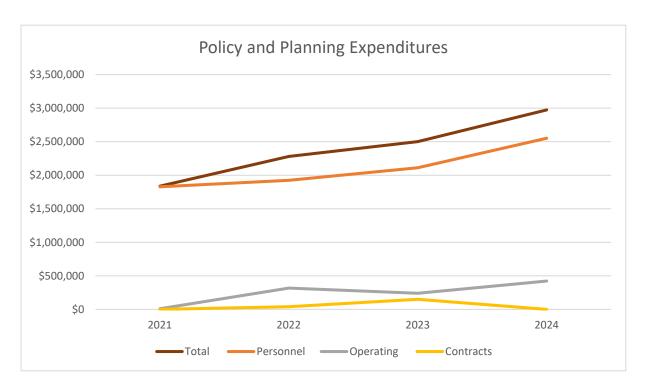
	2021 (expenditures)	2022 (expenditures)	2023 (anticipated	2024 (endorsed)
			expenditures)	
Seattle City Light	\$115,500	\$120,000	\$123,000	\$125,000
Department of Transportation	\$501,813	\$553,965	\$537,206	\$585,517
Parks and Recreation	\$142,721	\$148,310	\$181,979	\$183,762
Seattle Public Utilities	\$116,871	\$116,871	\$123,354	\$123,354
Department of Construction and Inspections	\$719,080	\$1,115,128	\$1,025,440	\$1,563,290
Office of Sustainability & Environment	\$223,283	\$216,094	\$500,393	\$383,128
Seattle Center	\$0	\$0	\$0	\$0
Office of Planning & Community Development	\$18,000	\$10,000	\$10,000	\$10,000
Facilities and Administrative Services	\$0	\$0	\$0	\$0
Total	\$1,837,268	\$2,280,368	\$2,501,372	\$2,947,051

¹Throughout the report, expenditures are reported as follows, by department:

- Parks, OSE, Seattle Center: Adopted/Proposed budget amounts
- SDOT, SPU, SCL, SDCI, OPCD, FAS: Actuals or anticipated actuals
- * OPCD estimated expenditures are based on estimated base labor costs for existing staff

Caution is recommended in interpreting year-over-year trends, as expenditures were influenced by fiscal impacts of the pandemic that took place over the duration of this report, and that were unrelated to urban forestry policy direction (see Budget Context).

Expenditures by year and category (policy & planning)



Policy and Planning Trends

- Policy and planning expenditures grew by 44% over the time period but remained a relatively small
 percentage of total urban forestry expenditures (9-12%). Budget growth supported additional personnel
 for regulatory compliance (SDCI), environmental analysis (SPR), and citywide urban forestry planning
 (OSE).
- Personnel increases during this period included:
 - Increasing SDCI land use group staff assigned to urban forestry from 3 FTEs plus a manager to 6 FTEs plus two interns and a manager. There is also 1 FTE who was added to the inspections group in 2023. These staff review plans for compliance with the tree code and confirm tree protections are installed per approved site plans. One additional position included in the tree protection ordinance will be filled in 2024.
 - Adding an environmental analyst at SPR with funds from the Metropolitan Parks District (MPD) who will work closely with SPR Urban Forestry staff to support analytical needs and will build SPR's capacity to respond to climate change through tree planting, expanded tree care, and ecological restoration in landscaped parks and natural areas across the city.
 - Adding a Senior Urban Forestry Strategic Advisor to OSE, to serve a cross-departmental leadership role, building internal and external collaborations to meet Seattle's 30% canopy cover and forest health goals, and develop a Citywide canopy equity and resilience plan and investment strategy to focus planting, maintenance, education, and resilience efforts on communities with the least canopy.

- Policy and planning roles play an important role in strategically assessing needs and opportunities,
 developing plans and partnerships to meet our canopy goals, developing and enforcing tree regulations,
 incorporating urban forestry into citywide policies such as the Comprehensive Plan, Climate Vulnerability
 Assessment, heat preparedness plans, and others, building partnerships and applying for external
 funding, conducting assessments like the canopy cover assessment, and developing plans like the Canopy
 Equity and Resilience Plan.
- Capital departments opted to assign a percentage of total staff time to policy and planning, reflecting that many of their staff play some policy and/or planning role. However, this approach may overstate the staff capacity dedicated to this area.

Activity: Community Engagement

Because 58% of Seattle's urban forest is within private lands, it is critical that we engage the community as an important component of our urban forestry efforts. Engagement tools include providing education and support to residents on the value of trees and how to care for them, and engaging residents regarding the status of the urban forest in their neighborhoods and the best plans for improving and increasing it.

This work is conducted by City staff and contractors and includes work in the programs described below.

<u>Trees for Neighborhoods</u> – SPU manages this program that provides at least 1,000 trees per year to residents for planting in their yards and in the right of way. In addition to providing trees, the program also provides help in selecting the right tree and planting location, watering bags and mulch, training on proper planting and care, ongoing care reminders and pruning workshops, and street tree health evaluations for the first couple of years.

<u>Green Seattle Partnership</u> – This program works to restore the City's forested parklands. In doing so, it engages community through volunteer stewardship opportunities, including Forest Steward leadership roles, educational activities, as well as school and group engagement. Career exposure and job training programs also engage community participants in restoration and community building experiences.

<u>Industrial Area Planting</u> – the Office of Sustainability & Environment manages a program to plant and establish trees in industrial areas adjacent to residential neighborhoods in the Duwamish Valley. To do this, OSE works with community organizations to engage with industrial property owners around the benefits of green infrastructure on their property, to get property owner agreement to implement and maintain green infrastructure projects on their properties, and to design and construct the projects.

<u>Urban Tree Replacement Program</u> – Seattle City Light works with residents to select and plant trees in the right of way adjacent to their homes and on private property. In doing this, they provide education and outreach to residents in equity priority neighborhoods and provide the trees and planting assistance. This program is housed within the newly established Utility Urban and Community Forestry program (2.5 FTE) which is focused on increasing SCL's community engagement activities at the intersection of traditional Urban Forestry and Utility Vegetation Management work.

Community Engagement Activities by Department

Activity/Location	Departme nt	Annual Outcomes / measures / extent		
Manage Trees for Neighborhoods program, providing residents with trees, education and supplies to plant trees on residential property	SPU	 Provide 1,000 trees for residents to plant, with a focus on outreach to high heat / low canopy neighborhoods. Provide supplies such as mulch and watering bags for the 1,000 trees. Respond to over 1,000 inquiries about tree health and other tree concerns. Provide education to residents through workshops and updates about maintenance and establishment needed for trees provided through T4N. Track health and survival of street trees planted through program. 		
Engage community through forest restoration job training programs and forest stewardship opportunities	SPR	 Provide more than 100 paid career exposure and job training opportunities per year. Each year, support more than 30,000 volunteer hours. Provide 9 public workshops and webinars annually, as well as 15 additional educational opportunities to support knowledge building and early engagement. Coordinate an Engagement Committee with representation from partner organizations and community participants. Deliver the monthly GSP newsletter to 25,000 people and engage audiences through the GSP blog and social media. Host the annual Green Seattle Day and the citywide Seattle Forest Week events. 		
Engage community through Safe Routes to Schools and the Move Seattle Levy programs, and provide community with information on street trees	SDOT	 Attend community events, mail postcards, and coordinate with schools on neighborhood tree planting programs. Support outreach efforts for Capital Projects; attend Seattle Design Commission briefings and public workshops. Respond to public concerns related to street trees, including removals associated with private development or street improvement projects. Provide information to SDOT Director to highlight trees in social media. 		
Provide community with information around tree issues and questions	Urban Forestry Core Team	 Respond to more than one thousand questions and concerns from the public related to tree issues each year (separate from T4N responses noted above). Maintain Trees for Seattle website as the coordinated hub for all City information related to trees Deliver monthly Trees for Seattle newsletter to 5,800 people with cross-departmental information Maintain Trees for Seattle social media accounts 		
Implement Urban Tree Replacement Program	SCL	 Work with community to plant 30-60 trees in the right of way each year. Work with community groups in South Seattle on the "Green Line" transmission ROW in the Duwamish Valley, to co-manage the ROW. 		
Conduct greening of industrial areas adjacent to residential neighborhoods in the Duwamish Valley	OSE	 Engage with 10-15 property owners each year. Implement 3-5 projects per year, covering 3-5 acres and including 200-400 total plants. 		

Community Engagement Budget information

Expenditures by Category (community engagement)¹

	2021 (expenditures)	2022 (expenditures)	2023 (anticipated expenditures)	2024 (endorsed)
Personnel*	\$757,863	\$776,767	\$848,497	\$883,870
Operations	\$25,162	\$18,391	\$22,230	\$28,407
Contracts**	\$570,955	\$864,725	\$1,202,419	\$1,230,188
Total	\$1,353,980	\$1,659,883	\$2,073,146	\$2,142,465

^{*}For departments whose staff work encompasses multiple activity types (SPR, SPU, SDOT, SCL), personnel allocations for each activity type are determined based on an estimated breakdown of percentages. For example: Seattle City Light has 17 total FTE with a personnel cost of \$1,155,000-\$1,250,000. For the purposes of this report, that total staff cost is split across the three activity types with the following assumptions: 80% direct management, 10% policy and planning, and 10% community engagement.

¹Throughout the report, expenditures are reported as follows, by department:

- Parks, OSE, Seattle Center: Adopted/Proposed budget amounts
- SDOT, SPU, SCL, SDCI, OPCD, FAS: Actuals or anticipated actuals
- * OPCD estimated expenditures are based on estimated base labor costs for existing staff
 Caution is recommended in interpreting year-over-year trends, as expenditures were influenced by fiscal impacts of the pandemic that took place over the duration of this report, and that were unrelated to urban forestry policy direction (see Budget Context).

Expenditures by Department (community engagement)¹

	2021 (expenditures)	2022 (expenditures)	2023 (anticipated expenditures)	2024 (endorsed)
Seattle City Light	\$127,500	\$132,000	\$135,000	\$142,000
Department of Transportation	\$250,906	\$276,982	\$268,603	\$292,759
Parks and Recreation	\$653,090	\$663,963	\$967,698	994,950
Seattle Public Utilities	\$322,484	\$286,938	\$401,845	\$412,756
Department of Construction and Inspections	\$0	\$0	\$0	\$0
Office of Sustainability & Environment	\$0	\$300,000	\$300,000	\$300,000
Seattle Center	\$0	\$0	\$0	\$0
Office of Planning & Community Development	\$0	\$0	\$0	\$0
Facilities and Administrative Services	\$0	\$0	\$0	\$0
Total	\$1,353,980	\$1,659,883	\$2,073,146	\$2,142,465

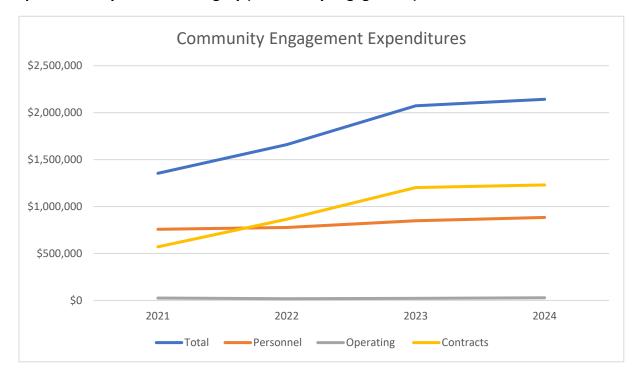
¹Throughout the report, expenditures are reported as follows, by department:

- Parks, OSE, Seattle Center: Adopted/Proposed budget amounts
- SDOT, SPU, SCL, SDCI, OPCD, FAS: Actuals or anticipated actuals
- * OPCD estimated expenditures are based on estimated base labor costs for existing staff

Caution is recommended in interpreting year-over-year trends, as expenditures were influenced by fiscal impacts of the pandemic that took place over the duration of this report, and that were unrelated to urban forestry policy direction (see Budget Context).

^{**}Contract allocations specific to GSP, or direct management and community engagement activities are determined based on an estimated breakdown of 80% direct management, 20% community engagement via consultant contracts with partner organizations.

Expenditures by Year and Category (community engagement)



Community Engagement Trends

- Community engagement expenditures make up only 8% of the overall urban forestry budget. These
 expenditures are primarily personnel and contracts for programs like <u>Trees for Neighborhoods</u>,
 Duwamish Valley industrial planting, and the Urban Tree Replacement program. Other areas of work
 include a centralized communications portal (<u>Trees for Seattle</u> website), staff who respond to thousands
 of email and phone inquiries per year, and <u>Green Seattle Partnership's</u> engagements with community
 organizations.
- Parks District funding provided a substantial increase in funding for SPR urban forestry work starting in 2023, including in community engagement. This funding supports community engagement related to new tree planting in developed parks and partnerships with community organizations to engage residents in restoration of forested parklands.
- Fluctuations at SPU in 2022 and 2023 are due to changes to Trees for Neighborhoods programming during the covid pandemic. The 2023 reported amount is roughly the pre-pandemic baseline level.
- OSE began the Duwamish Valley industrial greening project in 2022, which continues through 2024. This
 project aims to improve air quality in the Duwamish Valley through tree planting in industrial areas
 adjacent to residential neighborhoods.

Gaps and Challenges

As this report demonstrates, City departments accomplished many things in recent years. In 2021 and 2022, more than 3,000 trees were planted, 44 acres enrolled in restoration, 300 community members were provided paid job training opportunities, and the City released an updated canopy cover assessment and passed a long-awaited update to Chapter 25.11 Tree Protection Ordinance 126821. Still, just as trees in our urban forest face challenges in surviving and thriving, City programs engaged in urban forestry face challenges based on factors such as climate change impacts and tree conditions, available resources, needs around community engagement and urban forestry coordination, and needs around workforce retention and development.

As requested in the SLI, this section discusses current gaps and challenges.

Resource Gaps

- Maintenance of existing trees: Despite modest increases in direct management expenditures in some departments, departments currently do not have the staff necessary to meet the maintenance needs of our existing trees. There is a backlog of maintenance work across urban forestry departments, including tree inspections, pre-emptive tree care, pruning, inventory, and invasive pest management and monitoring. Additionally, as the City plants more trees, these add to the total inventory of City trees to be established and maintained. The consequences of not addressing these maintenance needs include increased tree failures and increased emergency response cases. The maintenance backlog is exacerbated by the increased tree maintenance needs that are due to the compounding of an aging forest and climate change factors. Determining the scale of this gap is beyond the scope of this report.
- Enforcement of tree regulations: While personnel were added in 2024 to support evaluation and enforcement of tree regulations, SDCI and SDOT will continue evaluating capacity needs to implement these regulations. SDCI's Code Compliance division anticipates increased workload related to the new Tree Protection Ordinance. They anticipate an increase in complaints to address, given the broader range of enforcement issues, such as the tree work notice requirements, tree service provider registry, and additional trees regulated for Tiers 1-3. SDOT anticipates an increase in street tree permits to review. Three new positions were added at SDCI and one at SDOT along with the new ordinance. However, based on the level of complexity, number of permits, and other workload implications, SDCI and SDOT will monitor whether additional capacity beyond those added positions will be needed as the ordinance is implemented.
- Implementation of Executive Order 2023-03 One Seattle Tree Plan (EO): This EO increases the replacement requirements for trees removed on public lands from 2:1 to 3:1 for most trees removed and requires 5 years of watering/maintenance (aligned with current best practices). Implementing this EO requires additional staff for planning, planting and maintenance, and operating funding for water and equipment. As more trees are added to the City's portfolio, the ongoing maintenance need increases (see above bullet on maintenance). Trees planted on private property through the Trees for Neighborhoods program also help to meet the replacement requirements. The City is also pursuing philanthropic and outside funding for these efforts.
- Maximizing the canopy potential of the ROW: All urban trees face challenges given the built environments they live in. For trees in the right of way, limited space and competing uses concentrate and heighten these challenges. At the same time, rights of way are opportunity areas for neighborhood greening, especially where development is dense. Our streets are where people walk and they lie adjacent to homes and businesses, so having sufficient tree canopy here is important for community livability. There is currently a lack of locations ready for street tree planting, especially in

equity priority neighborhoods; it will take considerable work to identify and create plantable spaces to increase street tree canopy. Doing this work requires staff with the expertise to conduct field verification of sites, outreach to ROW-adjacent residents, coordinate with utilities to assess feasibility of each location, and develop viable landscape plans that meet the needs of trees and the built environment. And new trees planted require commensurate maintenance staff levels. As we look to maximize the canopy potential in the ROW, SDOT will monitor whether additional capacity is needed to ensure we are making the most of available ROW space.

- Developing an urban forestry workforce pipeline: Urban forestry is a specialized field, and staff recruitment and retention in the urban forestry field are critical to grow and maintain our vibrant urban forest. Departments need trained employees and fully staffed crews to accomplish their urban forestry work plans, and it can be difficult to recruit for and maintain diverse, qualified staff teams. As the City looks at opportunities to increase pathways to green careers, there is an opportunity to develop a job pathway program to recruit and train staff from diverse communities and lived experiences into City urban forestry employment. Retention of existing employees is also important, as trained staff bring institutional knowledge and skills.
- Engaging the whole community in tree care and stewardship: Effective care and management of the urban forest relies on an engaged, informed community. To help accomplish this, there is a continued need for culturally relevant and community-centered engagement that can build urban forestry knowledge and commitment. As the City addresses the challenges facing the urban forest and our management of it, it is important to ensure equity and community voice, especially from communities most impacted by climate and environmental injustice.

Climate Change Challenges

Climate change is influencing nearly every facet of urban forestry management. The effects of climate change that we are experiencing in this region include drought stress, which leads to increased tree mortality; increased storm frequency and storm-related tree failures; and high heat events. These effects drive challenges for urban forest management such as:

- Increased watering needs for trees: There is a need to increase the period for providing establishment care such as watering for newly planted trees from 3 years to 5 years. Extending the establishment period in this way can increase the likelihood of young tree survival, especially in times of extreme weather events. With this increase in the establishment period for young trees, there is an additional increase in direct management costs in personnel and operational budgets to ensure sustainable and successful long-term canopy needs. The increases in direct management expenditures that have occurred in recent years have not been enough to address this shift; additional increases in personnel and operations budgets are needed to enable us to meet this new climate-driven need.
- Extreme heat effects on human health: Trees are an essential component of the City's urban heat mitigation strategy. There is a need to increase planting and maintenance of trees to provide shade in high heat neighborhoods, which fall disproportionately in historically marginalized communities.
- <u>Increased impacts on tree health</u>: Climate effects are causing negative impacts to tree health from diseases and pests, since trees stressed by drought are more susceptible to damage than healthier trees.
- <u>Increased impact on people caring for trees</u>: Extreme heat and smoke resulting from climate change also impact the people caring for trees. Workers and volunteers require extra protection, and increasingly, these climate events lead to cancelled tree work events and reduced work days.

- <u>Difficulty sourcing trees</u>: To promote forest health under future climate scenarios, urban forestry teams aim to source tree species and genetic provenance to match these future scenarios. It is increasingly difficult to source these trees for planting, sometimes constraining planting efforts.
- <u>Aging trees</u>: Our urban forest contains a high percentage of aging trees. Some of these trees are
 strong and mature, while others are more susceptible to potential tree failures resulting from
 climate-related pests, diseases, or weather events. City crews seek to retain trees where possible
 (through cabling and other supports), but sometimes removal is necessary to avoid failure. When
 removed, these trees require replacement to keep our forest strong and thriving.

Conclusion

As this report demonstrates, much has been accomplished in recent years. In 2021 and 2022, more than 3,000 trees were planted, 44 acres enrolled in restoration, 300 community members were provided paid job training opportunities, and the City released an updated canopy cover assessment and passed a long-awaited update to Chapter 25.11 Tree Protection through Ordinance 126821. Overall, City expenditures in urban forestry grew by 23% over the four-year period reported. The City is investing in a wide range of urban forestry work across nine departments, from direct management to policy and planning, to community engagement. However, as determined by the canopy cover assessment and outlined in the details above, these increased investments have not yet been enough to meet the needs and overcome the challenges facing the urban forest. Additional analysis is necessary to determine the level of increased funds and additional staff resources needed to enable the City to close the gaps identified, including exploring federal, state, and other sources of funds.

Plans for future reporting

This report provides a baseline for reporting on the City's urban forestry investments, including historical trends. As noted in this report, expenditure data is subject to externally-influenced fluctuations, such as the impact of the covid pandemic, which limits the interpretations of the data in this report.

Per Executive Order 2023-03 – One Seattle Tree Plan, OSE will build on this baseline and work with CBO and the urban forestry interdepartmental team to prepare a report on urban forestry investments on a biannual basis moving forward, and future reports will include budget information, which better reflects policy decisions. The City will also continue to track progress toward canopy goals through updated canopy assessments and other tools and analyses. The City will review that progress alongside City investments to inform necessary adjustments in investments and work plans.