Urban Forest Directions Report

LAND ACKNOWLEDGEMENT

The City of North Vancouver respectfully acknowledges that we live and work on the traditional and unceded territories of Sḵwx̱wu7mesh Úxwumixw (Squamish Nation) and səl̓ilwətaɬ (Tsleil-Waututh Nation). The City of North Vancouver is committed to Reconciliation with these local First Nations, who have lived on these lands since time immemorial. We thank them for sharing this land with us and for their ongoing partnership with the City on mutual priorities.

THE DIRECTIONS REPORT IN A NUTSHELL

The City of North Vancouver Urban Forest Directions Report lays out a path forward to grow a thriving, resilient urban forest that supports a livable, healthy and climate-resilient community. At less than 12km^2 of total land area, the City of North Vancouver is setting an ambitious canopy cover target of **24% by 2055** to achieve this vision. Reaching this target will require planning and management, effective policies, and community collaboration to protect existing trees, grow canopy cover, and manage the urban forest in the face of climate change.

This Directions Report was developed in consultation with Diamond Head Consulting Ltd.

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Thriving Trees, Thriving City

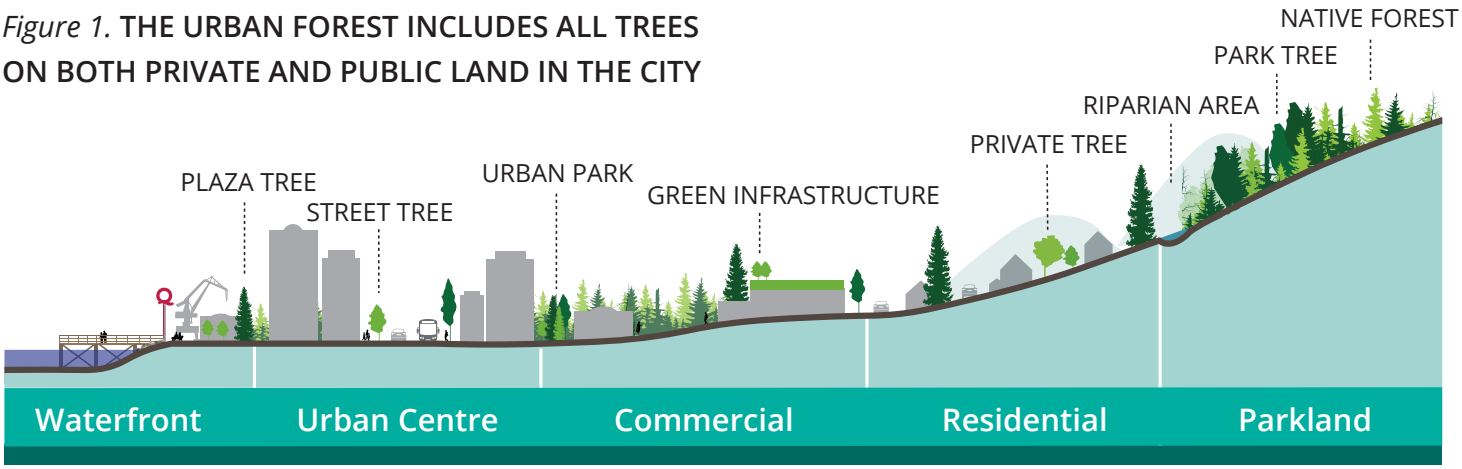
The City of North Vancouver's urban forest is a critical part of our community's identity, beauty and resilience. From the towering native trees in Greenwood Park to the scenic walkways of Grand Boulevard, the urban forest includes all trees and supporting vegetation in the City. It is an interconnected ecosystem encompassing soil, water, and air that sustains life and enhances our urban environment.

The Urban Forest Directions Report (the Directions Report) identifies goals and objectives to achieve a thriving urban forest. The intent is that the Directions Report will provide guidance on how to address trade-offs, such as balancing tree retention with community change, considering ways to increase canopy cover with development, and creating sufficient space for trees along busy streets. The Directions Report implements the Official Community Plan and Climate and Environment Strategy directions to restore, protect, and enhance natural areas and biodiversity on public and private property.

WHAT IS THE URBAN FOREST?

The urban forest is found across the City, from the single tree shading a bus stop, to a neighbourhood grove where kids and pets play, to forest fragments that cool salmon streams, and connect urban areas to the forest landscape of the North Shore mountains *(Figure 1)*.

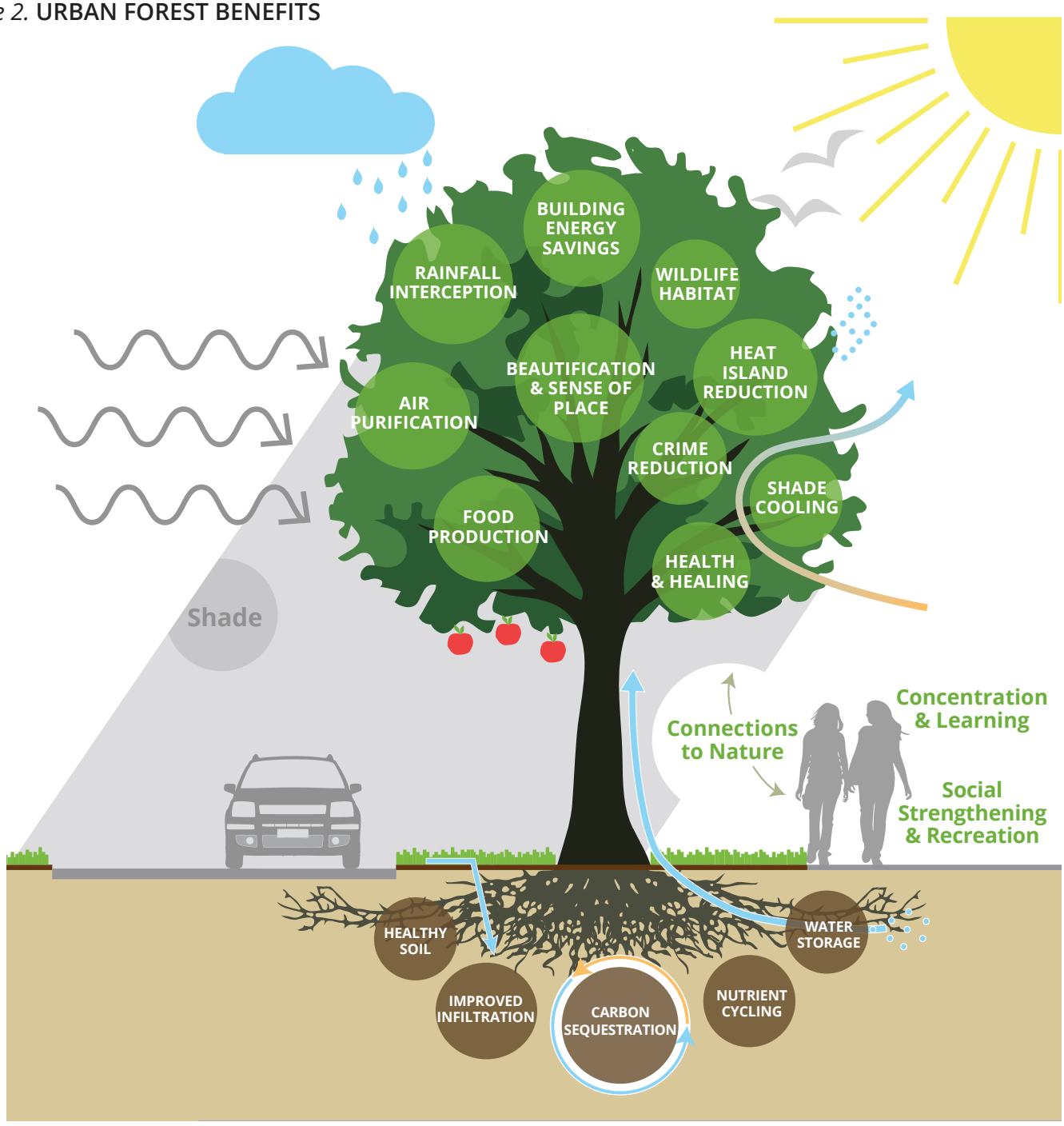
Figure 1. **THE URBAN FOREST INCLUDES ALL TREES ON BOTH PRIVATE AND PUBLIC LAND IN THE CITY**



WHY IS THE URBAN FOREST IMPORTANT?

Trees are living natural assets, providing vital benefits such as cooling streets,[i] managing stormwater,[ii] supporting biodiversity,[iii] and enhancing community wellbeing.[iv] They help shape the character and identity of our city, defining parks, neighbourhoods, and streetscapes. With much of the City covered by heat-absorbing surfaces like roads and rooftops, areas such as Central and Lower Lonsdale face higher temperatures and are more vulnerable to extreme heat. Trees not only mitigate climate change by sequestering carbon[v] but also help cities adapt to its impacts by providing shade and cooling, reducing flood risks and stabilizing soils.

Figure 2. URBAN FOREST BENEFITS



DIRECTIONS REPORT DEVELOPMENT PROCESS

Prepared a State of the Urban Forest Report to set baselines and share key findings about the urban forest (December 2023)

Engaged the community and interested parties to understand values, priorities and perspectives (February 2024)

Completed a capacity analysis to understand how many trees can be planted on City lands (March - April 2025)

Developed the Urban Forest Directions Report (November 2024 - December 2025)

The State of the Urban Forest Report (2023) is available here.

WHAT WE HEARD

In early 2024, we engaged with the community to shape the Urban Forest Directions Report. Community feedback was gathered through surveys, mapping exercises, pop-ups, webinars, school and youth workshops, interest holder workshops and committee presentations.

We heard from approximately 650 people, including 233 survey participants, over 100 students, and around 250 attendees at our pop-up events.

Many respondents expressed support for more trees in the City and concern about the potential of losing trees from increased urbanization and climate change. A summary of results can be found in the Phase 1 Engagement Summary Report.

The following summarizes what we heard in community feedback:

- **Increase canopy cover equitably**: Grow the urban forest overall, especially in higher-density neighbourhoods.
- **Contribute to high-quality public spaces**: Grow, protect and manage the urban forest to create natural spaces for recreation and social interaction, supporting physical and mental health.
- **Improve cooling benefits**: Grow, protect, and manage the urban forest to help keep buildings, streets, and sidewalks cool.
- **Support ecosystem services**: Grow the urban forest to continue improving stormwater management, air purification, energy savings, carbon sequestration and other important benefits.
- **Improve climate resilience**: Increase the variety and climate-resilience of the tree canopy to foster critical habitats and a thriving, interconnected and climate-resilient ecosystem.
- **Strengthen partnerships**: Respect Indigenous knowledge, perspectives, and practices. Increase community stewardship of trees.
- **Manage sustainably**: Manage the urban forest on City lands in a way that maximizes its benefits and minimizes its risks, for a reasonable cost.

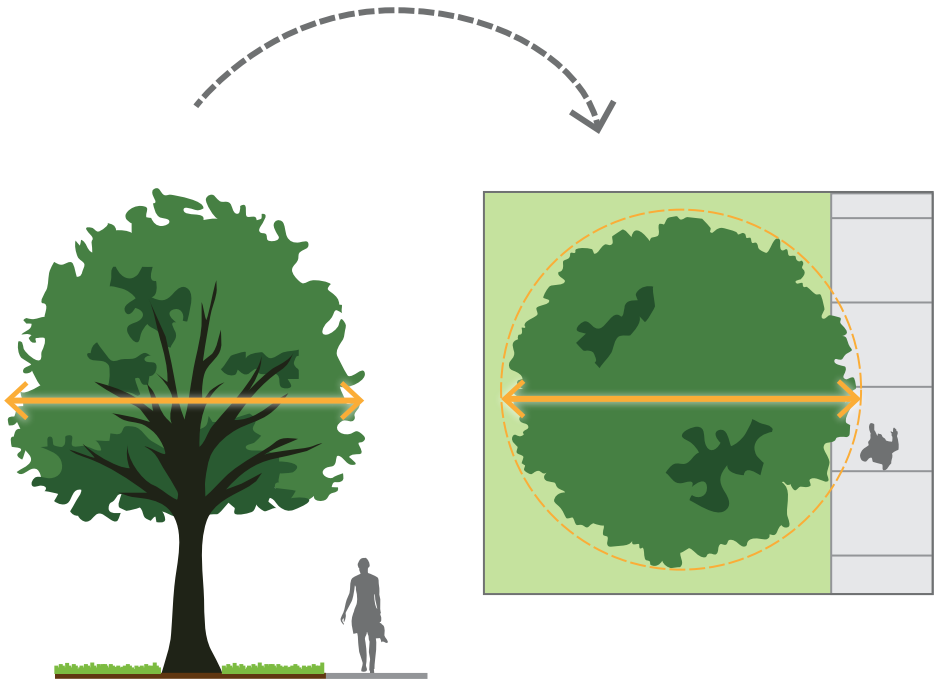
Key Findings

The following summarizes key findings from the State of the Urban Forest Report (2023).

What is Canopy Cover?

Canopy cover is the primary way of measuring Urban Forest health.

Figure 3. **CANOPY COVER BENEFITS**



KEY FINDING #1:
City-Wide Tree Canopy Cover was 20% in 2021.

At 20%, the City's canopy cover is comparable to other highly urbanized and compact communities, but below the regional average.

The canopy cover of highly urban areas like the City of North Vancouver, City of New Westminster, City of Vancouver, and City of Langley ranges between 14% and 25% according to Metro Vancouver's most recent estimates (2020).

A healthy and extensive urban canopy is a vital part of green infrastructure, providing a wide range of environmental, economic, and social benefits. Awareness of current canopy coverage can help direct actions to create a more sustainable, resilient, and livable urban environment.

KEY FINDING #2:

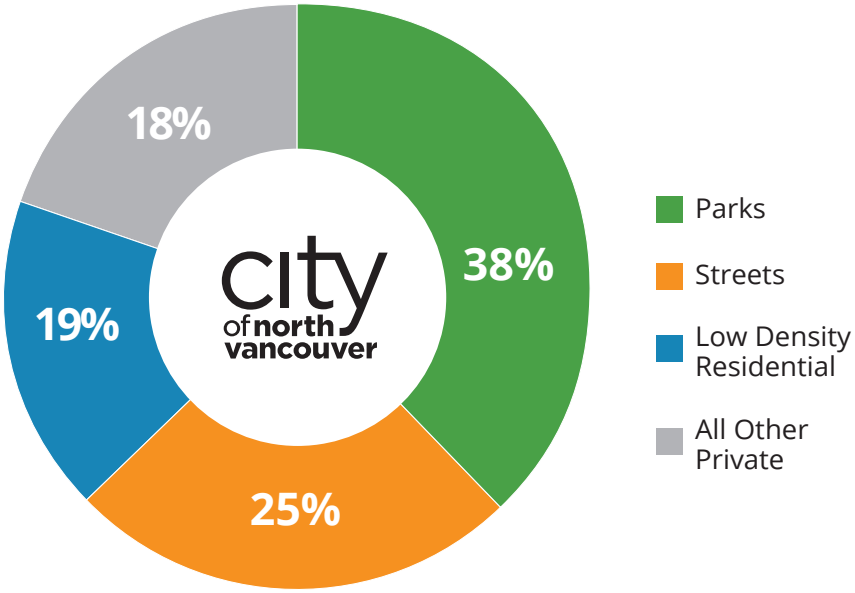
65% of the Urban Forest is on City-Managed Public Lands, and 35% is on Private Property.

On City-managed public land, most canopy cover is located in forested parks. On private property, canopy cover is fairly evenly split between low density residential areas, and other private lands.

Growing canopy cover on both private property, and also on low canopy public streets right-of ways, will improve the City's livability, and the health and wellness of all residents.

Understanding tree canopy distribution on private and public land is a key component to effective urban forest management.

Figure 4. **CANOPY AREA BY MANAGEMENT UNIT**



KEY FINDING #3:

Tree Canopy Cover Remained Stable Between 2007 and 2021, but Factors Driving Tree Loss are Becoming More Prominent.

Tree canopy cover in the City has remained stable at 20% since 2007, due to ongoing tree planting efforts on City lands. In order to protect and manage the existing cover, proactive measures will be needed to mitigate the impacts of climate change. For example, the City is already experiencing drought and pest stressors, such as western hemlock looper moth.

KEY FINDING #4:

Most of The City's Trees are Young (Less Than 80 Years) but Mature Trees are the Biggest Contributors to the Urban Canopy.

Most of the City's urban forest consists of small trees that are still growing, which is promising for the future of the tree canopy. However, large trees, though fewer in number, provide the majority of the existing canopy area and ecosystem services to the community. Retaining these mature trees is the most effective strategy for maintaining and enhancing the City's overall tree canopy cover. This approach is far more cost-effective and efficient for maintaining a healthy and resilient urban forest that provides immediate and significant benefits to the community.

KEY FINDING #5:

The City has a Variety of Tree Species, Forest Ages, and Forest Types, but Further Diversification is Needed to Improve Resilience to Climate Change Impacts.

Tree diversity is important to reduce losses from insects, disease, and climate impacts. Increasing species diversity in urban settings can help protect the urban forest from stressors that target closely related trees. Maple and cherry species account for 28% of the City's tree inventory, making it important to plant less of these species. Trees assessed to be vulnerable to drought impacts according to Metro Vancouver make up 29% of the City's tree inventory, highlighting the need for more climate-adapted planting. Climatically suitable, diverse, and native tree species are selected for planting through several City programs, including the Living City Planting Program, Park Stewardship events, natural area restoration activities, external grant opportunities, park improvement projects and development landscaping requirements. These programs will continue to support diversity in the tree canopy.

In natural areas, having a variety of tree ages and forest types builds resilience to natural disturbances like fire, disease, and storm damage. The City's natural areas contain mainly young (under 80 years old) or mature (80 to 140 years old) stands of trees, with no old-growth forests remaining. The City manages trees on public land guided by the City Tree Policy for the management of trees on City property, and responds to over 500 service requests annually. Special projects are undertaken to address forest health and tree hazard caused by western hemlock looper moth, other hazardous trees, FireSmart initiatives on public property, stump grinding, and invasive plant management in natural areas.

KEY FINDING #6:

The Amount of Tree Canopy Cover Varies Greatly by Neighbourhood.

Neighbourhood canopy cover ranges between 12% for highly dense neighbourhoods and 53% in the lower density residential areas close to natural forested areas. Increasing the tree canopy cover improves neighbourhood resilience to threats like extreme heat. By comparing canopy cover by block *(Figure 5)*, population density by block (Figure 6), and land surface temperature by block *(Figure 7)*, a clear correlation emerges: areas with limited canopy cover and high population density also exhibit higher land surface temperatures. Growing the tree canopy in neighbourhoods with low cover will take multiple efforts, such as prioritizing street trees and improving tree requirements for new development. This will help lower street and building temperatures in parts of the City where the most people live.

Figure 5. **CANOPY COVER BY BLOCK**

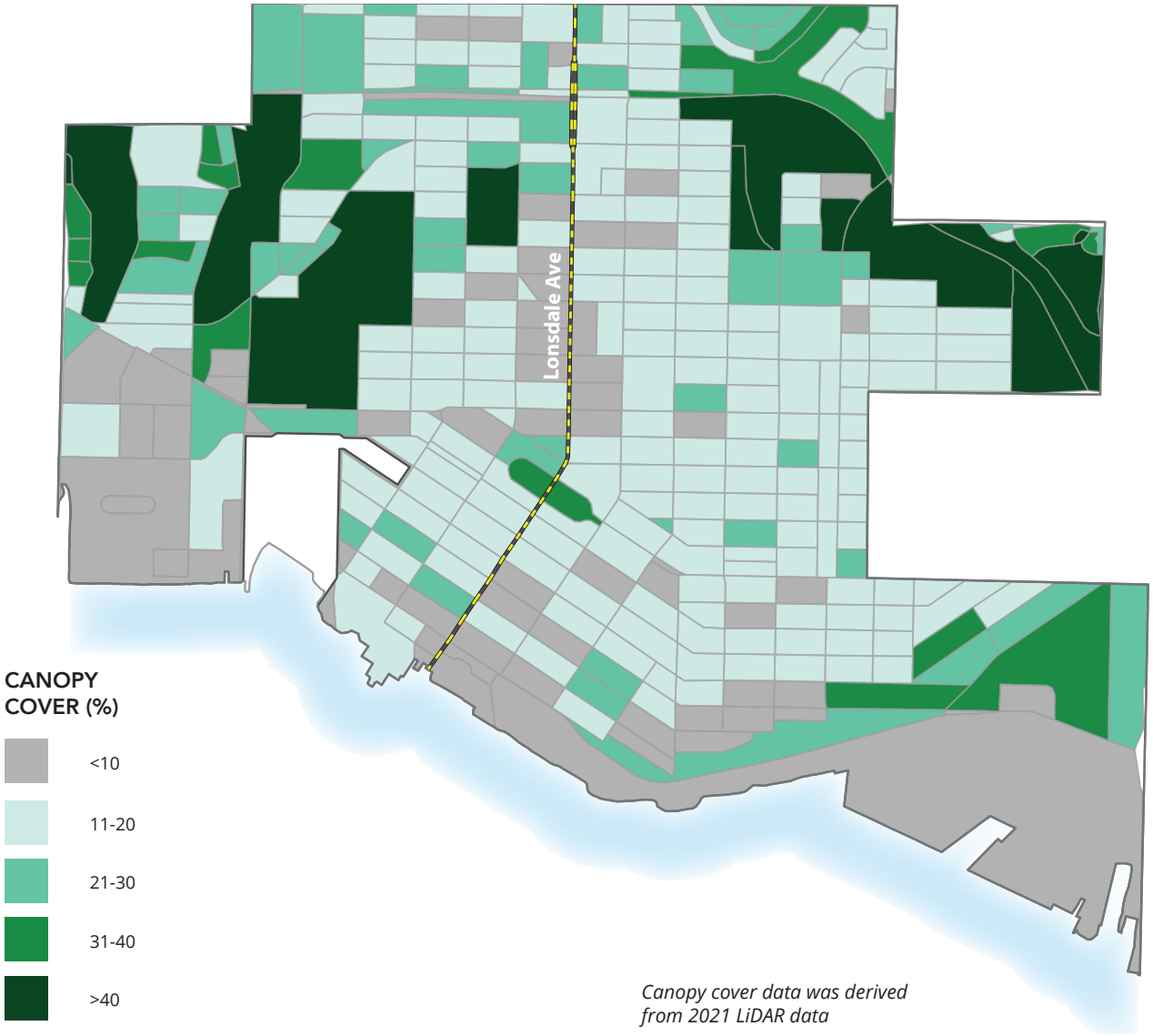
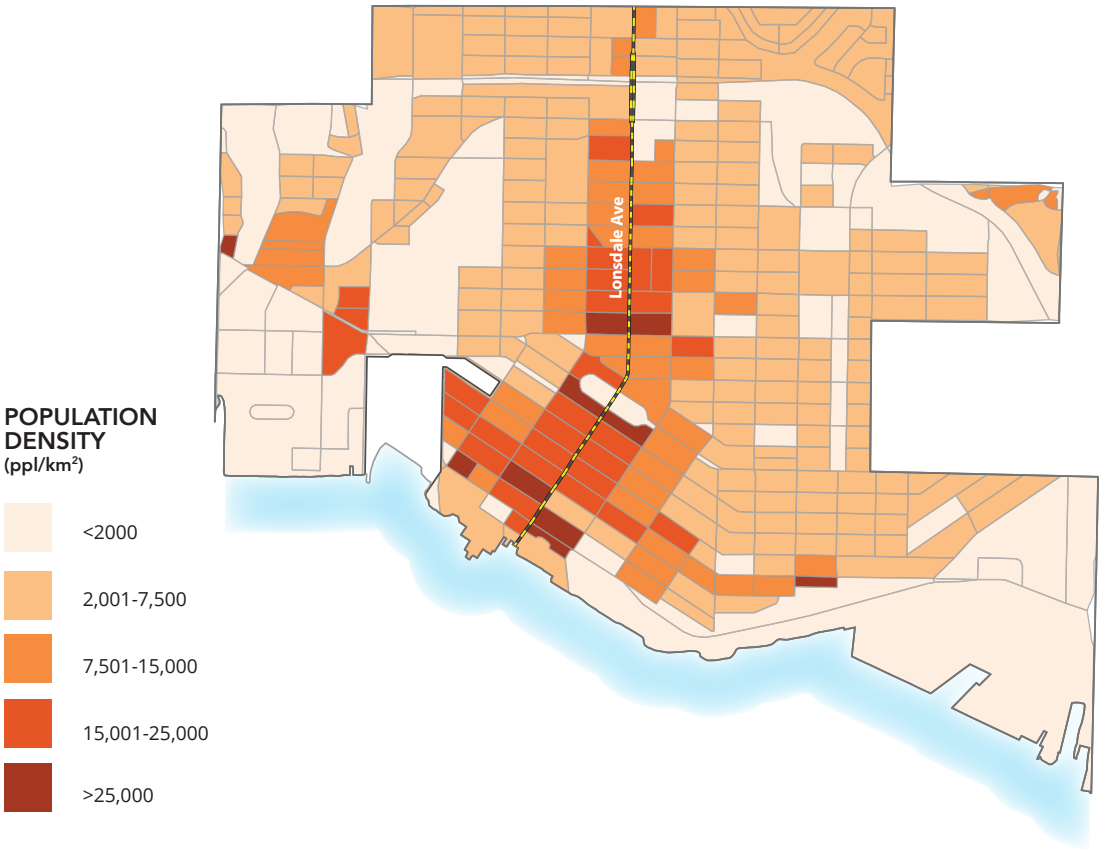
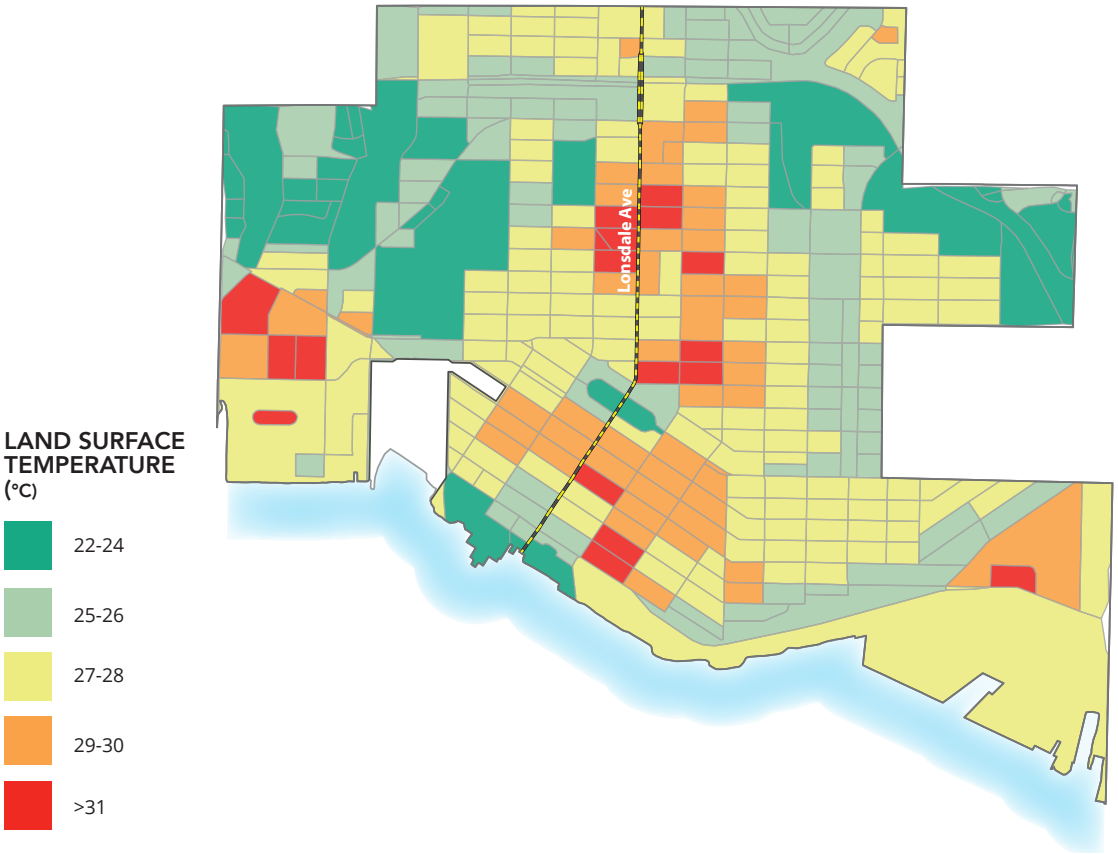


Figure 6. **POPULATION DENSITY (2021)**



Population density was calculated using 2021 Census data.

Figure 7. **LAND SURFACE TEMPERATURE (JUNE 30, 2021 – 7PM)**



Temperature data was derived from a satellite image taken on June 30, 2021, at 7 pm, near the end of that year's unprecedented heatwave.

What we Want to Achieve

Our resilient thriving urban forest cools our urban landscape and protects the community from climate change impacts, provides and connects vital habitats, and supports the health and well-being of all residents. Trees in the City are valued, prioritized, protected, well-managed, and invested in. The urban forest plays an important role in City policy and land-use decision-making to sustain the benefits it provides for future generations.

2055 CANOPY TARGETS

Grow the City's Overall Urban Tree Canopy Coverage to 24% by 2055

Growing a forest takes time, as trees can take 30 years or more to mature and develop a significant canopy. Trees are also increasingly impacted by hotter and drier summers, stronger storms, and pest and disease outbreaks that shorten their life expectancies and slow down growth. Investments made in the tree canopy today and over the next 30 years, will be critical to sustaining and growing North Vancouver's tree canopy far into the future.

The canopy target of 24% in 30 years will add an ambitious 28,400 trees into a City that has limited space for trees in its densifying, urbanized areas. The target will be achieved through the growth of young trees, sustained planting efforts, protecting existing trees and transforming underused spaces into tree planting areas.

The work done over the next 30 years to grow the tree canopy will have long-term benefits. The research tells us that increasing canopy cover in urban areas reduces land surface temperatures,[vii] reduces heat-related illness and energy consumption,[viii] improves mental and general health,[ix] and reduces runoff, particularly where conifers are present.[x]

Exceed 40% Canopy Coverage Over Streets in Priority Areas by 2055

Heatwaves can threaten the health and safety of residents, particularly those who are most vulnerable. Vulnerability to heat can be influenced by environmental factors (such as building density) and social factors (such as age and income). Areas of the City where residents are most vulnerable to extreme heat are also highly populated and are most urgently in need of tree planting. These areas have been identified as preliminary priority areas to direct tree planting which will be further developed using equity based data and criteria *(Figure 8)*.

Canopy cover is an effective way of mitigating the urban heat island by helping to cool sidewalks and buildings. In particular, canopy cover over street rights-of-way, which consists of the public streets, sidewalks, and boulevards, can reduce temperatures felt at street level by 1°C for every 10 % increase in canopy.[xi]

Current canopy cover within street rights-of-way averages 17%, but distribution is uneven across the city. Many of the busiest commercial and residential streets have less than 10% canopy cover, leaving them highly exposed to high temperatures. To address heat vulnerability in priority areas, street rights-of-ways with low tree canopy cover, high peak temperatures, and high pedestrian activity are being prioritized for additional tree canopy. By 2055 streets in priority areas are targeted to exceed 40% canopy cover.

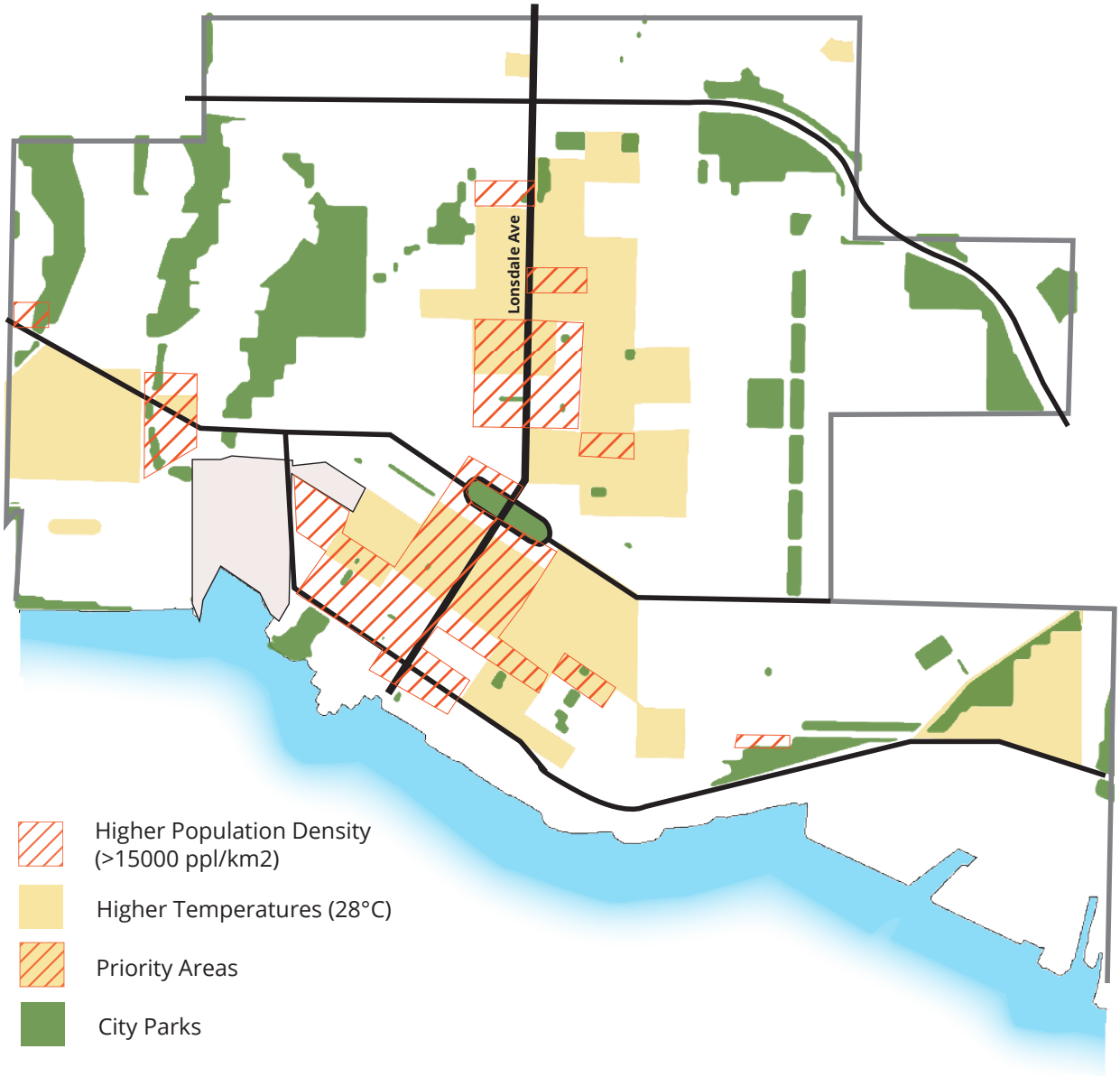
A resilient and expanding canopy along highly traveled networks will provide shaded routes and public spaces that connect commercial and cultural centers, residential neighbourhoods, and green spaces across the City.

Building a robust and connected public realm canopy requires more than maintaining healthy street trees within public rights-of-way. Increasing the canopy cover in highly urbanized areas requires investments and actions, for example replacing paved surfaces in the street with tree planting, relocating utilities and placing trees strategically on private land to shade the public realm. Investment in innovative approaches to utility design and tree planting to support larger canopy trees with sufficient soil volumes in these impervious streetscapes is necessary to cool these urban hotspots.

It also depends on front yard and private property canopy that contributes to the streetscape, as well as trees within privately owned but publicly accessible open spaces. Policy tools and incentives to encourage canopy growth on private lands in low-canopy areas must go hand in hand with public realm initiatives to achieve the targeted 40% canopy cover over streets in priority areas.

Figure 8 illustrates a preliminary map based on population density and measured peak surface temperatures, which will be further refined using equity data.

Figure 8. **PRELIMINARY PRIORITY AREAS**



Population density was derived from 2021 census data by block. Temperature data based on June 30, 2021 heat wave information by block.

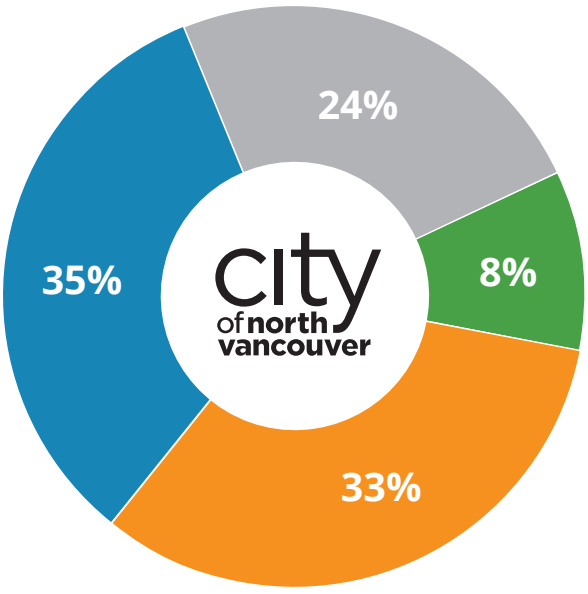
MOVE FROM MAINTENANCE TO GROWTH

The City of North Vancouver has maintained a stable canopy cover since 2007 by planting trees at a rate that has offset canopy losses. Looking ahead, achieving the 24% canopy target will require preventing losses of existing trees while significantly increasing new tree planting and replacement tree planting. This incremental approach will be achieved through a shared effort on both public and private land.

To reach a 4-percentage-point increase in canopy cover over 30 years (a 20% increase), roughly two-fifths of all new trees – including replacements – must be planted on public land, primarily within street rights-of-ways. Private land needs to provide three-fifths of new tree planting including replacements for the anticipated loss of trees through development.

Figure 9 shows the allocation of new and replacement tree plantings between public and private owned land. Public planting efforts will need to increase significantly but so will expectations for tree planting on new developments and incentive for tree planting on all private land supported by new policy work.

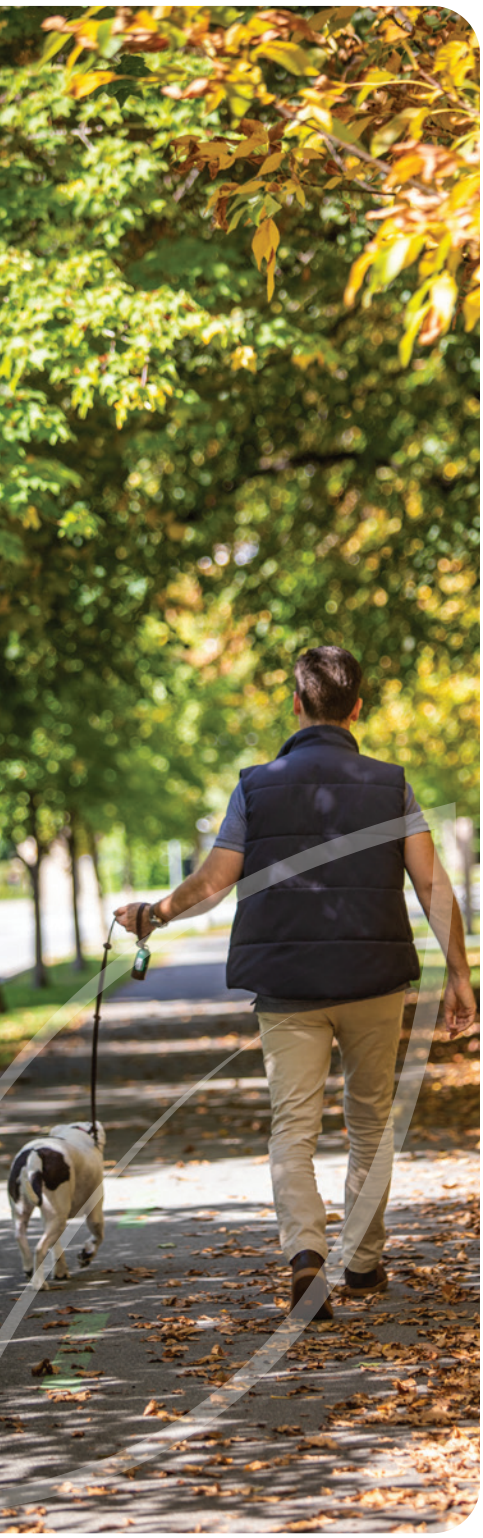
Figure 9. **ALLOCATION OF NEW TREES AND REPLACEMENT TREES TO BE PLANTED**



	NUMBER OF TREES
Parks	2,300
Streets	9,400
Low Density Residential	9,900
All Other Private	6,800

INVEST IN TRANSFORMATION

Achieving The City of North Vancouver's 2055 canopy target will require a transformative effort to add 28,400 trees of tree canopy on City parkland, streets and private land. To get there, the Directions Report assumes a gradual increase in the tree planting numbers for the first twenty years, followed by replacing trees for the last ten years:



Parks: Currently, City parkland has an average of 64% tree canopy cover with natural parks contributing the most canopy. To achieve a City-wide target of 24% canopy cover, the City will need to increase average tree canopy cover in parks to 65%. This will require the planting of 2,430 new trees over 20 years, including 800 replacement trees in urban parks and keeping up with replacement and restoration planting in natural areas. To get there, operational and capital resources will be required to scale up the urban forest program capacity to protect and manage the forest canopy in parks. Increasing canopy in urban parks with high demand on recreational open space needs to be carefully planned out to strike a balance between active uses and planting space.

Streets: Trees will need to be valued as an important utility in the design of right-of-way. City streets have an average of 17% tree canopy cover today. To achieve a City-wide target of 24% canopy cover, the City will need to increase average tree canopy cover along streets to 25%. This will require the planting of about 9,400 new trees in street right-of-ways including 1,400 replacement trees. Achieving the target will require retrofitting streetscapes by converting underused paved areas into planting sites, which will require resources to design, plan, build, and manage. This work can be supported by updating streetscape standards so that new development results in streets with enough right-of-way and soil volume to support healthy trees and stormwater infiltration.

Private Land: Private property includes residential, commercial, institutional, and industrial lands. Low-density residential uses are the single largest private land use and have an average canopy cover of 18%. All other private land uses average 10% canopy cover. To achieve a City-wide target of 24% canopy cover, the City will need to increase canopy cover overall by 2% on private land requiring the planting of 9,900 trees on low density residential and 6,800 on other private land.This work can be supported through improved tree protection and planning policies for land development, plus incentive programs. Some of the tools available to support tree planting on private land are listed in Figure 11.

How we can get There

GOAL 1:
Grow our Urban Forest Canopy Cover Equitably

The State of the Urban Forest Report found that canopy is not evenly distributed across the City with some neighbourhoods having high canopy cover such as Cedar Village (53%) and others having low canopy cover such as Lower Lonsdale (12%) and Moodyville (13%). Community input highlighted the importance of adding more trees, particularly in areas with low canopy cover. Growing the urban forest canopy equitably means increasing canopy cover in residential areas overall, and especially in higher density areas. Increasing tree canopy in residential areas will contribute to cooler streets and buildings, supporting ecosystem services, providing habitat areas, and contributing to supporting the sense of place in the City.

Objectives:

1. **Increase tree planting equitably** on public and private lands by prioritizing low canopy, high population areas.

2. **Incentivize tree planting and protection** on private lands by using regulations and guidelines to allow development to respond to site-specific conditions and increase canopy cover.

3. **Support healthier, larger and longer-living trees** by using established criteria for sufficient planting space, soil volumes, and soil conservation in City bylaws and standards for public and private lands.

GOAL 2:
Protect our Urban Forest from Canopy Loss

Most of the City's urban forest consists of small trees that are still growing, which is promising for the future of the tree canopy. However, large trees, though fewer in number, provide the majority of the existing canopy area. Retaining mature trees is the most effective strategy for maintaining and enhancing the City's overall tree canopy cover. This requires greater investment in urban forest operations on City land, stronger tree protections and incentives on private land, and regulatory tools that can protect tree canopy when land is redeveloped.

Objectives:

4 **Improve tree resiliency** to drought, pests, and extreme weather by planting more climate-adaptive species.

5 **Protect high-value trees during redevelopment** by using established criteria for their identification and retention

6 **Protect natural habitats** by restoring degraded and declining forest stands, linking fragmented forests, and expanding forested areas where possible.

GOAL 3:
Manage Trees for Health, Safety, and Resilience

Managing a growing urban forest requires dedicated resources, technology, and a collaborative approach. As the City's tree inventory grows, current resources are already operating at capacity, and significant investment will be required to support any increase in public tree assets. Transitioning resources to expand proactive maintenance and adopting asset management strategies will be essential to securing the long-term sustainability of the City's urban forest.

Objectives:

7 **Develop an Urban Forest Management Plan** to operationalize the Urban Forest Directions Report on City lands.

8 **Enhance tree planting, forest restoration, stewardship, learning, social connections, and integration of traditional knowledge** into urban forestry by expanding collaboration with Sḵwx̱wu7mesh Úxwumixw (Squamish Nation) and səl̓ilwətaɬ (Tsleil-Waututh Nation), residents, community groups and other organizations.

9 **Promote tree planting and maintenance throughout the City** through incentive and educational programs.

CHALLENGES AND OPPORTUNITIES

Responding to Climate Change and Forest Health Issues

Urban forests are under increasing pressure from climate change, with hotter, drier summers, drought, and extreme weather events causing declines in tree health and survival. Native species like western redcedar and western hemlock are particularly vulnerable, while pest outbreaks and invasive species further threaten urban tree populations. In the City, climate stress and pests have caused significant tree losses, particularly in Greenwood, Eastview, Heywood, and Loutet Parks. Over 200 mature trees have died and have been removed in parks, and over 100 street trees have been removed between 2021 and 2024 due to western hemlock looper moth infestations. The City is also experiencing more frequent storm events that damage trees, pose safety risks, and increase wildfire hazards. Additionally, the arrival of invasive pests like Emerald ash borer highlights the need to maintain a diverse and resilient urban tree population. The City can address these challenges by increasing tree diversity with climate-adaptive species, implementing proactive tree maintenance to identify and mitigate risks early, and investing in additional staff and resources to manage tree health, pest control, and extreme weather impacts. These actions will strengthen urban forest resilience and ensure long-term canopy health and safety.

Accommodating Residential & Economic Growth

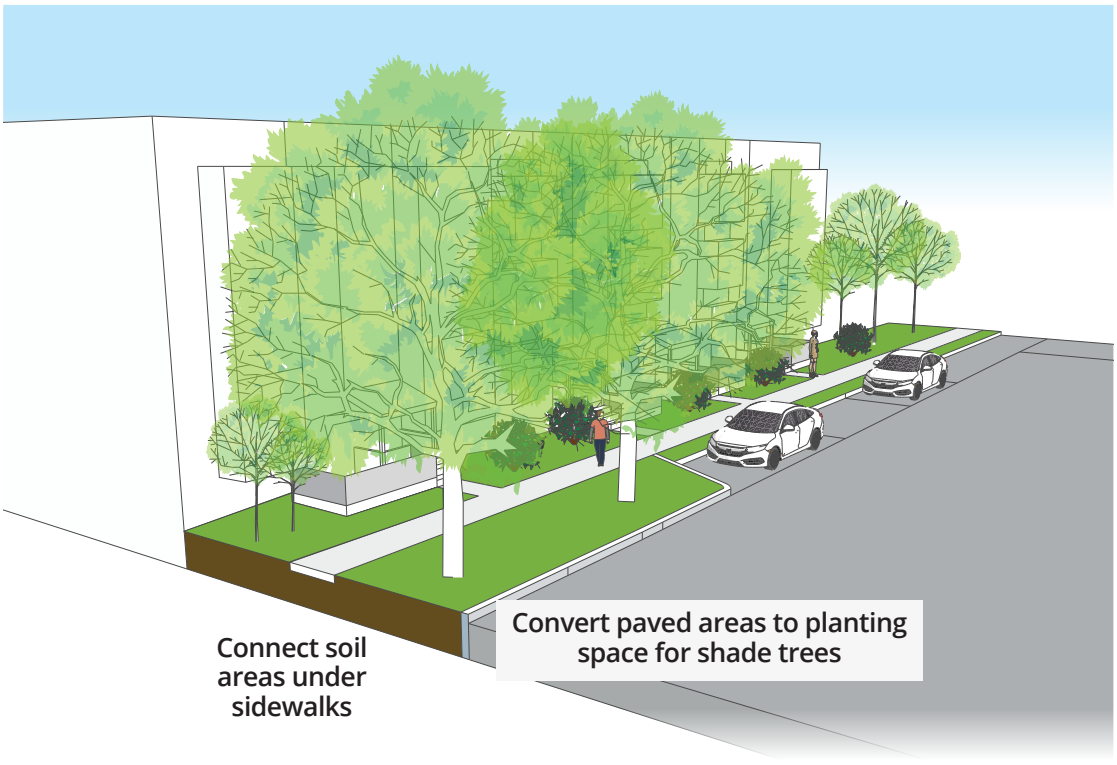
The City has done an exceptional job in providing housing that our region needs. It is a very desirable place to live and work and is one of the densest communities in Metro Vancouver and in Canada. The growth trend is expected to continue, and incorporating a net growth of trees in new development is needed to support liveability. Strategies to achieve net growth in tree canopy include expanded tree planting, improved landscaping guidelines, updated streetscape standards, additional tree protections, and more incentives to plant on private lands.

Competing Priorities for Public Land

Trees need space to grow, both above and below ground. In the City, limited space in the dense urban environment makes it challenging to plant trees while balancing requirements for roads, utilities, and development. In streets with no tree planting opportunities today, installing shade trees may require trade-offs to reallocate road space to planting space *(Figure 10).* A capacity analysis completed in the fall of 2024 revealed that street-right-of-ways can accommodate 1.5% canopy growth and parks can provide 0.5% canopy growth over 30 years and that easy spots are already planted.

Figure 10. **DIAGRAM ILLUSTRATING REALLOCATION OF HARD-SURFACES TO PLANTING SPACE**

BEFORE



AFTER

Finding Resources to Support an Expanded Urban Forest

Managing trees requires staff, funding, and equipment, and these demands are increasing as cities grow and as the climate changes. The tree population is growing at the City, with many new trees planted into compact, urban environments. These trees require more care to maintain, especially under a changing climate, increasing the workload on staff, programs, and equipment. To meet growing demands, the City will need to invest in capital and operational costs, such as additional staff, design and planning resources, updated equipment, and tree planting. Costs could be offset with grants, development contributions, and tax revenue to support tree maintenance.

Strengthening Policy Tools

Current policies, such as the City's existing Official Community Plan, lack clear direction on growing, protecting, and managing the tree canopy. Updates to regulatory tools, including the Zoning Bylaw, are needed to require new developments to allocate adequate planting areas and soil volumes necessary for support the growth of medium and large trees. Additionally, Development Permit Guidelines can require tree planting and replacement, as well as offer incentives for tree retention. Figure 11 summarizes how City policies, bylaws, and programs can help grow, protect, and manage tree canopy on public and private land.

Figure 11. **HOW THE CITY CAN INFLUENCE CANOPY COVER**

	CITY TOOLS	RECOMMENDED IMPROVEMENT	RESULT
PUBLIC LAND	STREETSCAPE DESIGN STANDARDS	Incorporate street standards with sufficient rights of-ways to support the required soil volumes to grow larger climate-adaptive street trees and to support soil conservation.	GROW CANOPY
	TREE POLICY FOR THE MANAGEMENT OF TREES ON CITY PROPERTY	Align tree protection and replacement with Arboricultural best practices and develop a City-tree compensation model based on latest standards.	REDUCE LOSS
PRIVATE LAND	ZONING BYLAW	Increase permeable areas and set building and parkade setbacks to allow for sufficient space and soil volume to support healthy trees. Provide greater flexibility to zoning requirements through minor variances, including adjustments to parking and building height requirements, to enable and incentivize tree retention during redevelopment.	GROW CANOPY
	FORM AND CHARACTER DEVELOPMENT PERMIT AREAS	Use Development Permit Area Guidelines with landscape requirements that facilitate an increase in tree canopy cover over time, such as tree planting, tree replacement requirements and incentives to retain trees.	GROW CANOPY
	TREE BYLAW - REGULATES TREE REMOVAL AND REPLACEMENT ON PRIVATE LAND	Add requirements for tree replacements in the bylaw to include provisions to incentivize large canopy trees.	REDUCE LOSS
	TREE INCENTIVES	Implement tree planting and maintenance incentives on private land, such as tree give away programs and maintenance grants prioritizing low canopy neighbourhoods and rental appartments.	GROW CANOPY

NEXT STEPS

The Urban Forest Directions Report provides guidance on policy and regulatory changes, investment, and programming. It is intended to provide high-level direction and targets to inform planning for annual priorities, capital budgets and actions. Achieving a 24% canopy target in 2055 will require operational changes, as well as ongoing collaboration with the broader community. This ambitious target and goals support the ongoing growth of the urban forest long into the future.

To implement the Directions Report, the following next steps are recommended:

- Update land use bylaws to grow, manage, and protect the urban forest on private land.
- Create the Urban Forest Management Plan to prioritize, phase, and budget the recommendations on public land.
- Update "Tree Policy for the Management of Trees on City Property" and include urban forest requirements in Streetscape Design Standards to grow, manage, and protect the urban forest on public land.

The Urban Forest Directions Report should also be used to inform:

- **The Annual Financial Planning Process:** Develop annual priorities of projects, programs, and staffing to be included in the City's operating and capital budgets and financial plan.
- **Work Programming:** Annual planning by each City department to guide budget allocation.
- **Grants from External Funding Sources and Partnerships:** Certain projects and/or programs and often require a financial contribution by the City which should be accounted for in the annual financial budget.

Monitoring: The City will continue to monitor progress by measuring and tracking canopy cover annually.

Glossary

ACCESS	Making a service or resource available for everyone to benefit from equitably and meaningfully.
ADAPTATION	Actions undertaken to prepare for and adjust to the current and projected impacts of climate change.
ASSET MANAGEMENT	A systematic process of maintaining, upgrading, and operating assets costs effectively. In urban forestry, this involves managing trees to maximize their benefits, ensure safety, and plan for long-term sustainability.
CLIMATE RESILIENCE	The ability to anticipate, prepare for, and respond to hazardous stresses or shocks related to climate change.
ECOSYSTEM SERVICES	The many direct and indirect benefits to human wellbeing provided by the natural environment, such as food production and flood mitigation.
HEAT ISLAND EFFECT	The phenomenon where urban areas become significantly warmer than their cooler, more vegetated surroundings, especially at night. This occurs because buildings, roads, and other heat-absorbing surfaces capture and store solar energy during the day, releasing it slowly after sunset.
IMPERVIOUS SURFACES	Hard surfaces that are not directly connected to the ground, so do not allow rainwater to soak into the ground before it reaches a stream. This can lead to more stormwater runoff, increased pollutants into our water systems, and impacts on stream and wildlife health.
MITIGATION	Ongoing actions to limit climate change and potential climate change impacts through the reduction of carbon pollution.
NATIVE SPECIES	Flora and fauna that are indigenous to a given region or ecosystem with no human intervention.
NATURAL AREAS	A site within the natural environment that is ecologically significant and relatively undisturbed.
PERVIOUS SURFACES	Surfaces that allow rainwater to soak into the ground.
RESILIENT	The ability withstand and/or recover from shocks and stresses, and the ability to proactively learn from experiences and improve conditions with consideration for mitigation, adaptation, and health.
RIPARIAN	The natural areas adjacent to streams, lakes, and rivers.
STORMWATER	Rain that lands on rooftops, roads, and sidewalks, and into our stormwater infrastructure system instead of soaking into the ground. Stormwater can be managed through measures like rain gardens, permeable surfaces, and planting trees.
TREE CANOPY	Tree canopy is a measurement which encompasses the layer of leaves, branches and stems of trees that shelter the ground when viewed from above.
URBAN FOREST	An interconnected ecosystem that refers to all of the trees, soil, and supporting vegetation in the community.
URBAN FOREST MANAGEMENT	The sustained planning, planting, protection, maintenance, and care of trees, forest, and related resources in and around cities, and communities for economic, environmental, social, and public health benefits for people and wildlife.

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