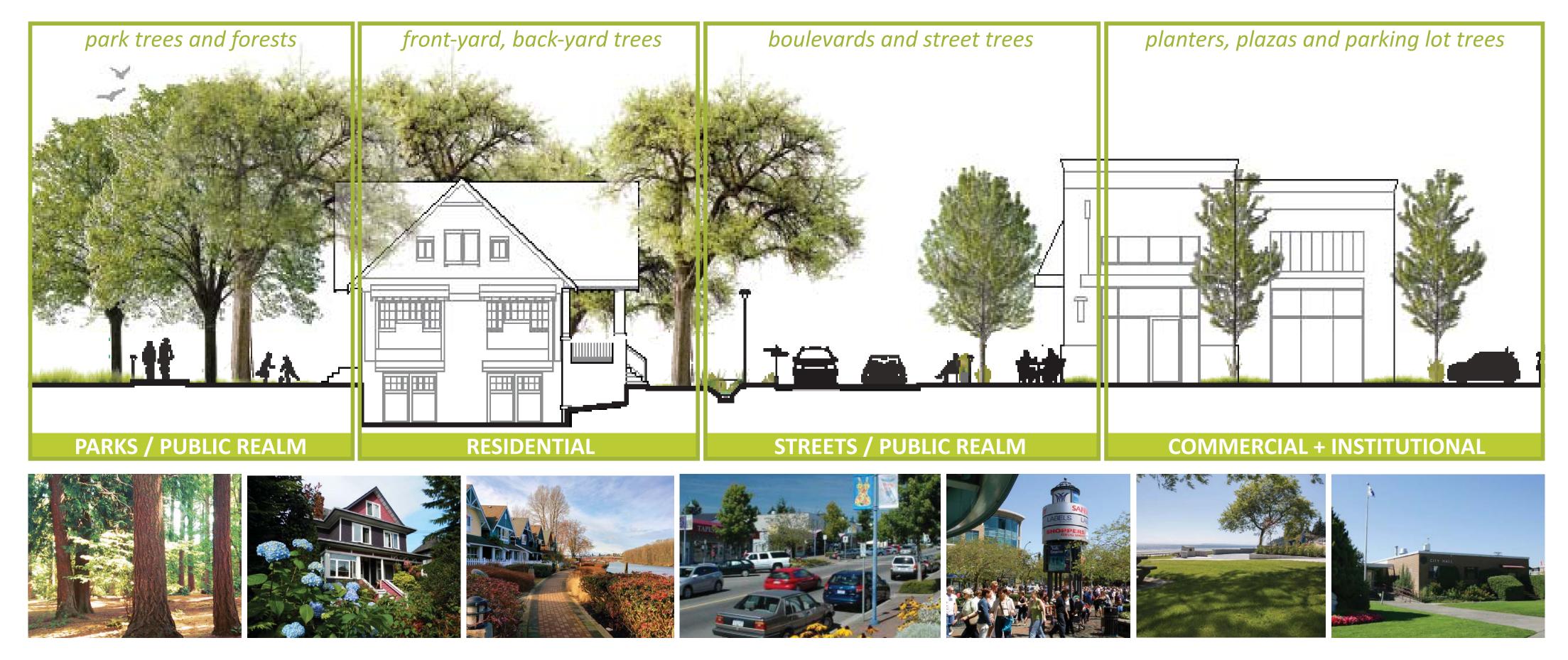


The City is developing an Urban Forest Management Plan. Work with us to co-create the future urban forest vision for White Rock and to guide the strategic management of the City's urban forest.

WHAT IS AN URBAN FOREST?

An urban forest includes the land in and around areas of intensive human influence, ranging from communities to dense urban centers, which is occupied or potentially occupied by trees and associated natural resources.



WHY DO WE NEED AN URBAN FOREST?

In Canada, and around the world, urban forests are becoming increasingly important because of the extent of urban land use and the populations living in cities. The benefits that were passively provided by nearby undeveloped natural or rural areas and large gardens now need to be actively replaced by planned urban forests and permeable areas within dense urban environments.





Urban Forest Objectives

Five management objectives are proposed for White Rock's urban forest. Please tell us what actions are most important for the City to focus on to achieve each one.

A. Protect and enhance canopy cover to reach a target of 27% by 2045.

If you see an action here that you agree with, please put a sticker or tick next to it.

B. Support a healthy, well-adapted and diverse tree population.

If you see an action here that you agree with, please put a sticker or tick next to it.



Urban Forest Objectives

Five management objectives are proposed for White Rock's urban forest. Please tell us what actions are most important for the City to focus on to achieve each one.

C. Manage the urban forest for community climate adaptation.

If you see an action here that you agree with, please put a sticker or tick next to it.

D. Strengthen ecological systems and biodiversity.

If you see an action here that you agree with, please put a sticker or tick next to it.



Urban Forest Objectives

Five management objectives are proposed for White Rock's urban forest. Please tell us what actions are most important for the City to focus on to achieve each one.

E. Engage and partner with the community to build stewardship of the urban forest.

If you see an action here that you agree with, please put a sticker or tick next to it.

I would also like to say...



Imagine White Rock in 2045, what should the urban forest be like? Place a sticker next to the vision that most represents the future you would like to see.

Vision 1

White Rock's urban forest offers beautiful parks and public spaces, tree lined streets and lush natural areas that provide sanctuary for birds and wildlife. The urban forest canopy is abundant and protected, supporting neighbourhoods that are peaceful and serene. The community works in partnership with the City to maintain a beautiful urban forest in the 'City by the Sea', creating an attractive and restorative destination for locals and visitors. *What could be improved about this statement?*

Vision 2

White Rock's urban forest is a beautiful and beloved public resource, providing opportunities to experience nature, breathe clean air and enjoy recreation within the community. Integrating nature within White Rock's neighbourhoods, the urban forest enhances wildlife habitat, captures carbon, manages stormwater and maximizes benefits to our city's environmental health and quality of life. Community members of all walks of life care for the urban forest that makes

White Rock a great place to live.

What could be improved about this statement?



Imagine White Rock in 2045, what should the urban forest be like? Place a sticker next to the vision that most represents the future you would like to see.

Vision 3

Defined by its healthy and functioning habitat, White Rock's urban forest provides an interconnected network of greenspaces, treed corridors and natural areas. Creating a strong connection to nature, the urban forest strengthens the ecology of the urban environment and helps to reduce and clean stormwater run-off, improve air quality and cool the city. With its urban forest, White Rock is a resilient coastal oasis that provides sanctuary for people, plants and wildlife. *What could be improved about this statement?*

Vision 4

White Rock's urban forest supports a beautiful city by the sea, balancing a healthy and beloved tree canopy with the maintenance of cherished ocean views. Vibrant urban forest and seaside public spaces unite the community in a mutual appreciation for the environment, establishing a legacy of heritage trees and important natural habitat. With a network of open green space and parks, tree-lined streets, and walking and cycle paths, White Rock's urban forest is integral to the

health and well-being of the community.

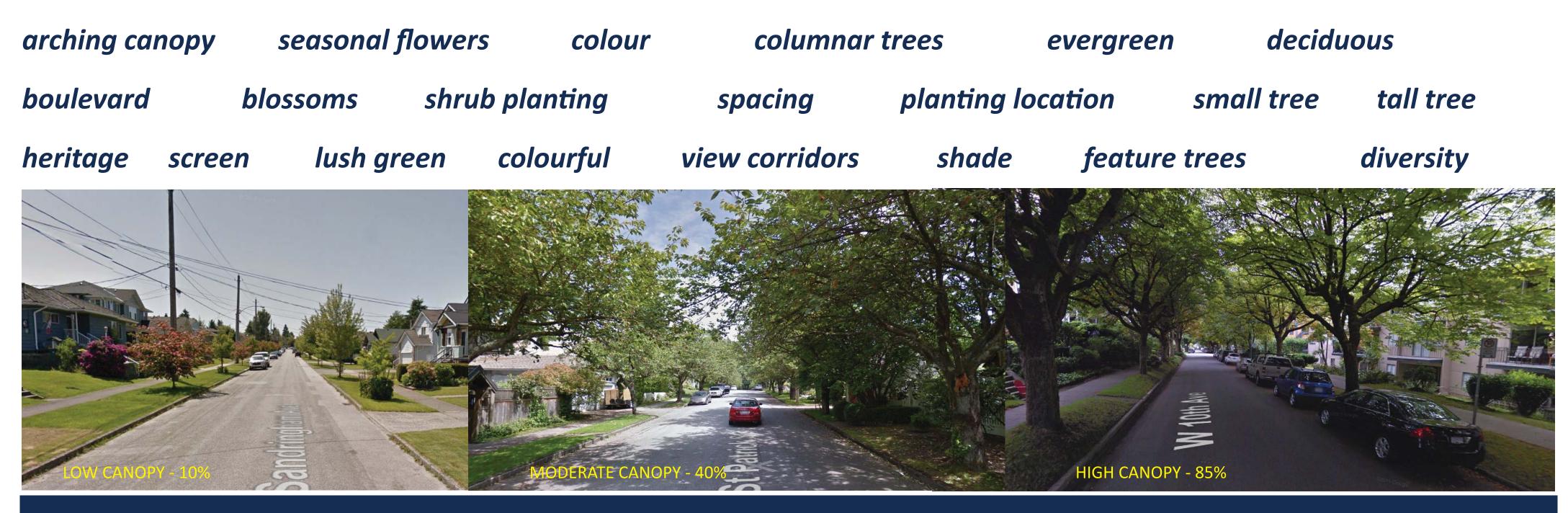
What could be improved about this statement?



Residential Street Tree Planting Character

Please describe the urban forest characteristics you would like to see represented in residential streets.

If you see a characteristic here that you agree with, please place a sticker next to it.

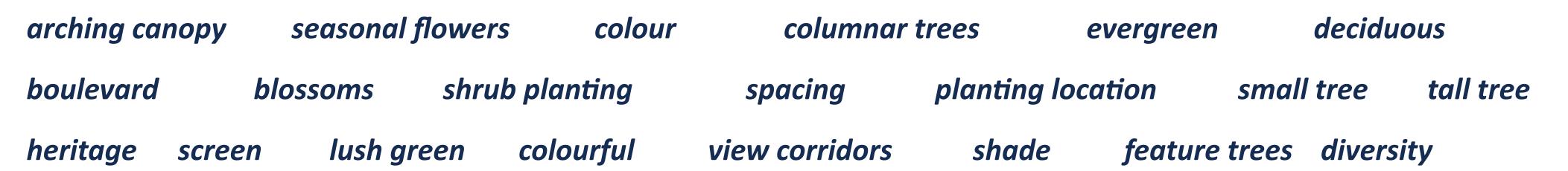




Commercial Tree Planting Character

Please describe the urban forest characteristics you would like to see represented in commercial streets and car parks.

If you see a characteristic here that you agree with, please place a sticker next to it.







Seaside Tree Planting Character

Please describe the urban forest characteristics you would like to see represented on the foreshore

If you see a characteristic here that you agree with, please place a sticker next to it.

arching ca	пору	seasonal flo	wers colou	ır columnar	r trees	evergreen	deciduous	
boulevard	blo	ossoms s	hrub planting	spacing	planting lo	ocation	small tree	tall tree
heritage	screen	lush gree	n colourful	view corridors	shade	feature	trees divers	ity

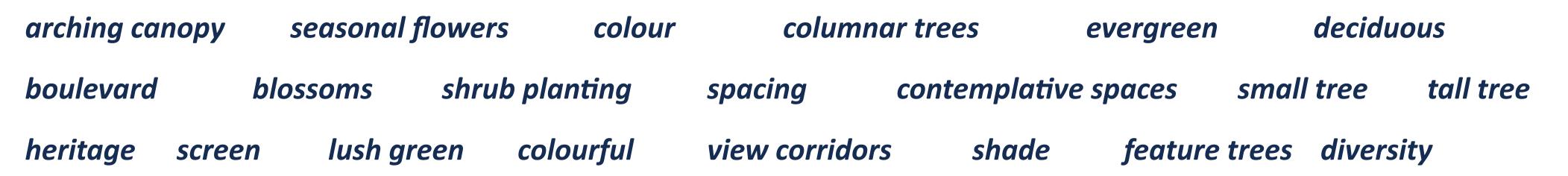




Park Tree Planting Character

Please describe the urban forest characteristics you would like to see represented in parks

If you see a characteristic here that you agree with, please place a sticker next to it.







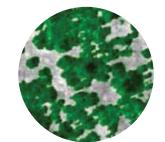
White Rock's proposed canopy cover target is 27% by 2045

1% of canopy = 5 ha of canopy in White Rock (~400 medium-large trees)

A canopy increase of 1% requires planting approximately 400 new trees costing between \$40,000 and \$140,000 to plant and up to \$7,000 per year to maintain over a 60 year life span. The average annual benefit provided by those trees is estimated at \$17000 yielding a 60 year lifetime benefit of \$1 Million and a net benefit return to the community of \$440,000 (quantified air quality, stormwater, carbon, energy savings)*.

		White Rock today 19%		2045 targ 27%	et	With aspiration to continue increasing canopy towards 40%		
10%	15%	20%	25%	0 0 0	30%	35%	•••••40%	
<i>White Rock's commercial and town centre has 4% canopy</i>				North American average 27% ca		<i>'Best Practice' benchmark for Pacific North west Cities is 40%</i>		

52%

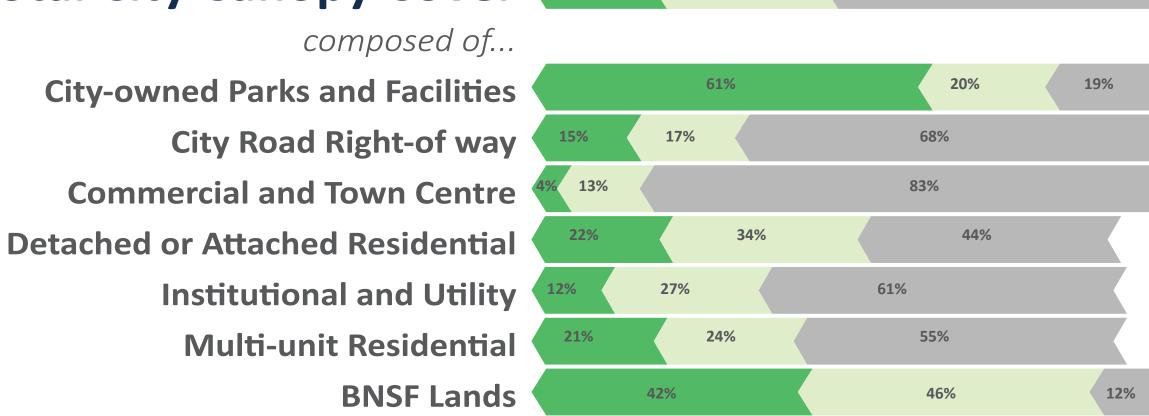


The extent of the urban forest is often measured by quantifying the urban tree canopy. Envision the layer of leaves, branches and tree stems when viewed from above.

HOW IS WHITE ROCK'S CANOPY PERFORMING NOW?

27%

Total City Canopy Cover



Canopy Cover Trend

Impermeable

Grass/Shrub/

Dirt

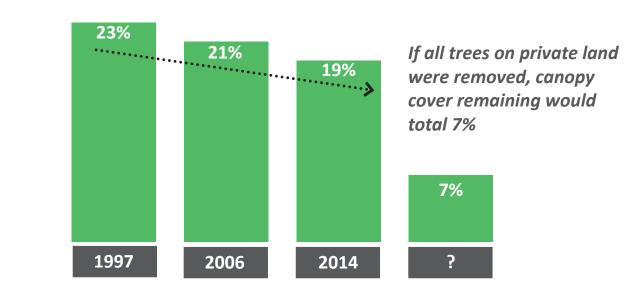
Canopy

Carbon

annually

917 tons

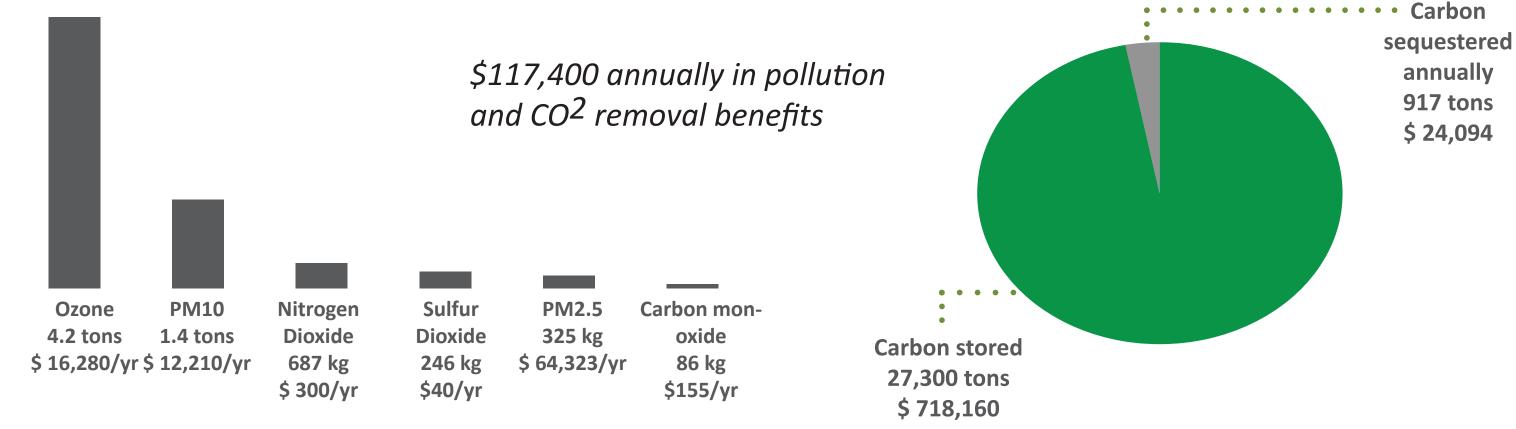
\$ 24,094



WHAT BENEFIT IS THE URBAN FOREST PROVIDING?

Yearly Pollution Removed

Carbon Stored and Sequestered



Additional Benefits

Examples of known benefits not quantified: Stormwater interception (7-22% reduction) Building energy reduction (~\$30 /tree/year)+ Slope stability Habitat and biodiversity Community strengthening Improved mental health and lower stress Faster healing and less sickness

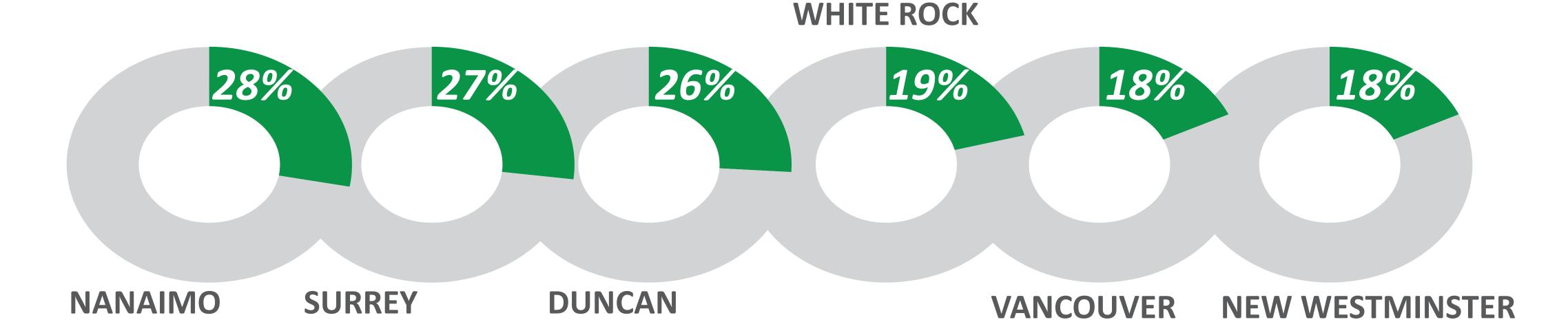
The World Health Organization reports that one in eight global deaths annually are caused by air pollution exposure. It is now the world's largest single environmental health risk. For more information on tree benefit research, visit the Green Cities: Good Health website

Recreation

Stimulation of local economy

⁺ 40 cm ash tree, well situated

HOW DOES WHITE ROCK'S CANOPY COMPARE TO NEARBY CITIES?



Canopy analysis for White Rock was made available using iTree Canopy software with a +/- 2% sampling error; sampling error varies according to sample size. Analysis techniques and sampling error of case study examples is unknown.

* McPherson, E.G.; J.R. Simpson; P.J. Peper; Q. Xiao; S.E. Maco; P. J. Hoefer. 2003. Northern Mountain and Prairie Community Tree Guide: Benefits, Costs and Strategic Planting. https://www.itreetools.org/ streets/resources/Streets_CTG/CUFR_258_North_CTG.pdf



White Rock's Urban Forest Survey

White Rock's urban forest survey was open from May 22 - June 17 2015. In total, 121 survey responses were recieved (50 online and 71 paper). For White Rock's population this represents an accuracy of +/-9% at the 95% confidence limit.

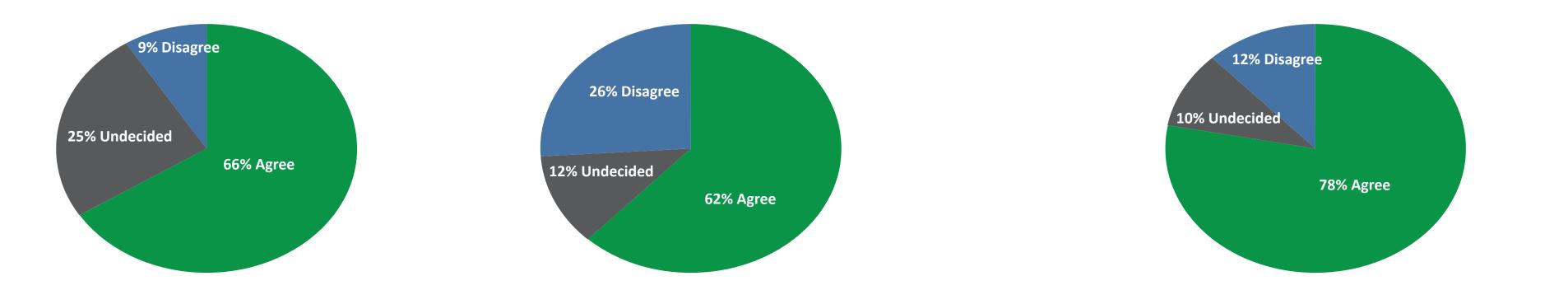
WHAT WE HEARD

The majority of people in White Rock recognize the importance of the urban forest in providing functional ecosystem services to the city related to water, air and cooling. The urban forest's role in the social and cultural identity of the City is also important, as is its contribution to habitat.

Results from selected questions...

Q4a The City should aim to increase canopy cover

Q4b The City should continue to have a tree bylaw that protects trees on private land to prevent future canopy loss Q4e The City should require minimum canopy cover for new developments. Developments would have to meet the target with tree planting on site or pay for equivalent tree planting on public land.



WHAT ABOUT TREES AND VIEWS?

When it comes to allowing pruning or removing trees for property views, opinions are divided. Trees and views are both important to people in White Rock. Please tell us what you believe is a fair balance for: 1 - your property? 2 - public property?

Photos are provided as references to assist in illustrating your response. Additional paper is provided.











Urban Forest Big Map

Please mark on the big map, by colour, locations that represent each of the questions below:

1. Where are the urban forest places you currently value and enjoy? (WHITE)

2. Where are there opportunities to plant new trees? (YELLOW)

3. Where are there opportunities to enhance what we have already? (PINK)