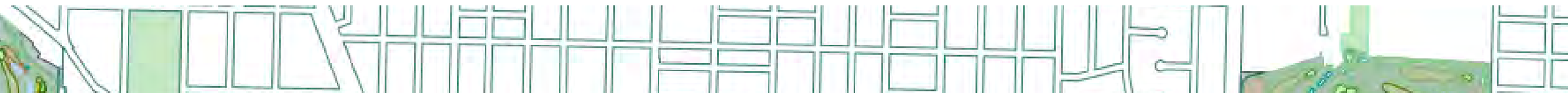
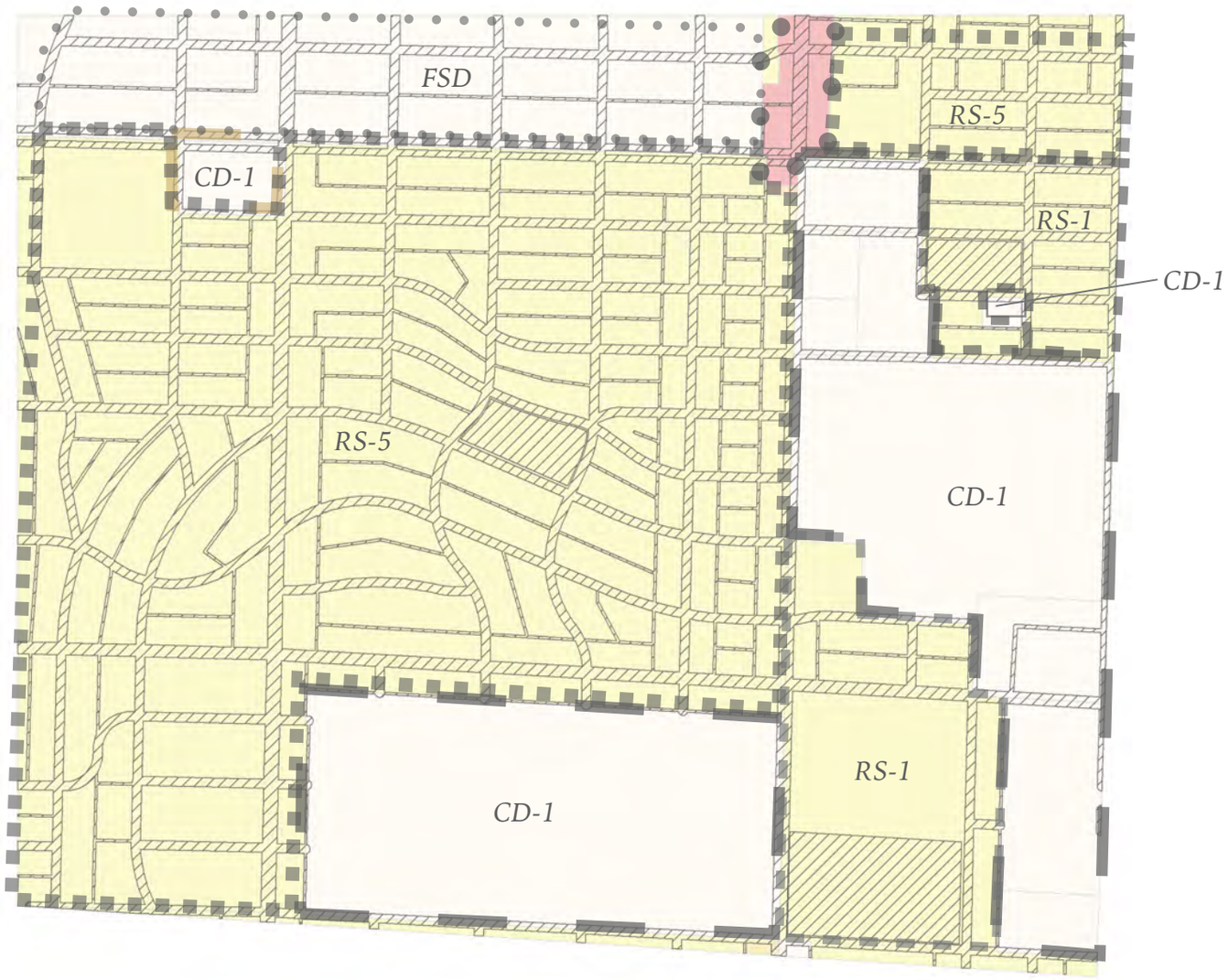
COV10

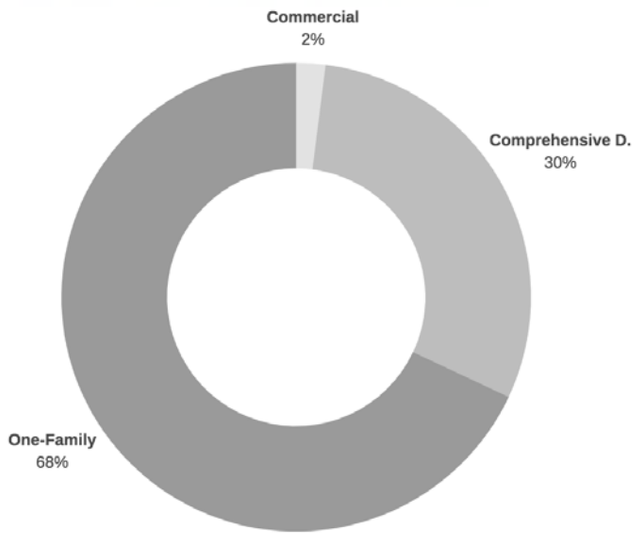
Thomas Idea : Kiefer Irvine : Sarah Bishop : Alina Kouneva [L]



Site Area: 2,722,037.5 sm

670 acres





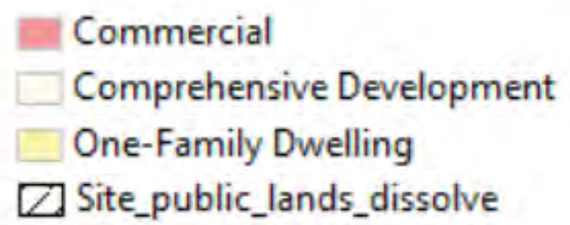
Adapted from Vancouver.ca and VanMap

***CD-1 (Site Specific)** : Separate and tailor - made zone for specific use*

***RS-5** : Preserve the existing character of the single-family residential zone by encouraging new development that is compatible with the form and design of existing development. Neighbourhood amenity is intended to be enhanced through the maintenance and addition of healthy trees and plants.*

***RS-1** : Preserve the existing character of the single-family residential zone, but also to permit conditionally one-family dwellings with secondary suites. Neighbourhood amenity is enhanced through the maintenance of healthy trees and planting which reflects the established streetscape.*

***FSD :** The intent of this District and accompanying official development plan is to protect and preserve Shaughnessy's unique pre-1940 single-family residential character. Provision is made to allow large pre-1940 houses to be redeveloped as multiple conversion dwellings, and to allow large sites with pre-1940 residential buildings to provide infill development.*



land use: zoning

GREY* :

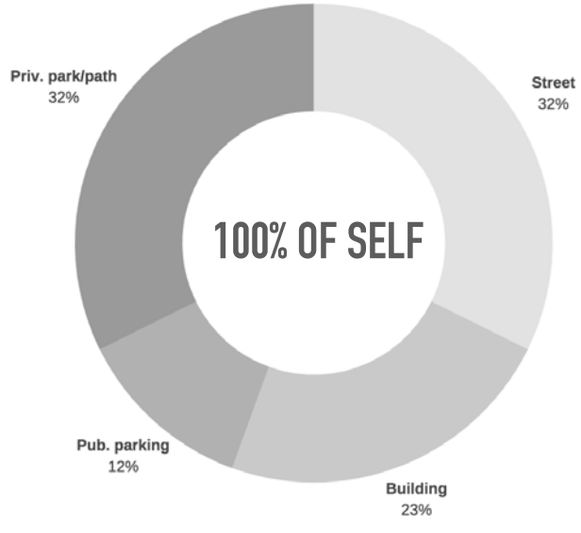
~ 1/3 dedicated to street

~ 1/3 dedicated to private driveways, pathways, patios, etc.

~ 1/4 dedicated to building foot print

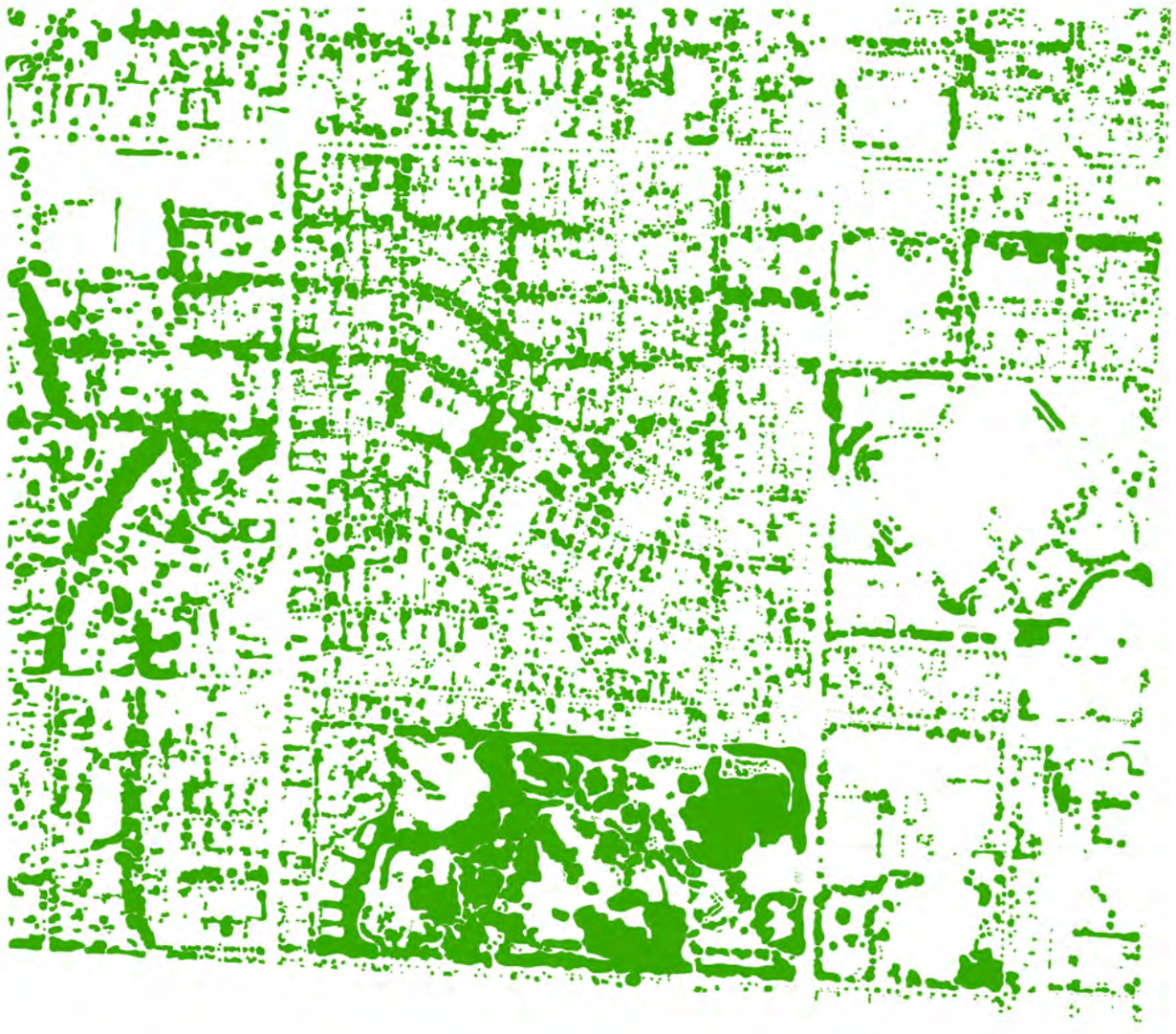
Tremendous amount of pavement, yet in correlation to City By-Laws allowing 60% of residential site to be impermeable. The additional 5% of total site is accounted for in public parking.

** Children's hospital, Safeway, and other cultural centre parking lots not shown in diagram; accounted for in overall percentage (12%)*



65%

grey



GREEN1 PUBLIC REALM :

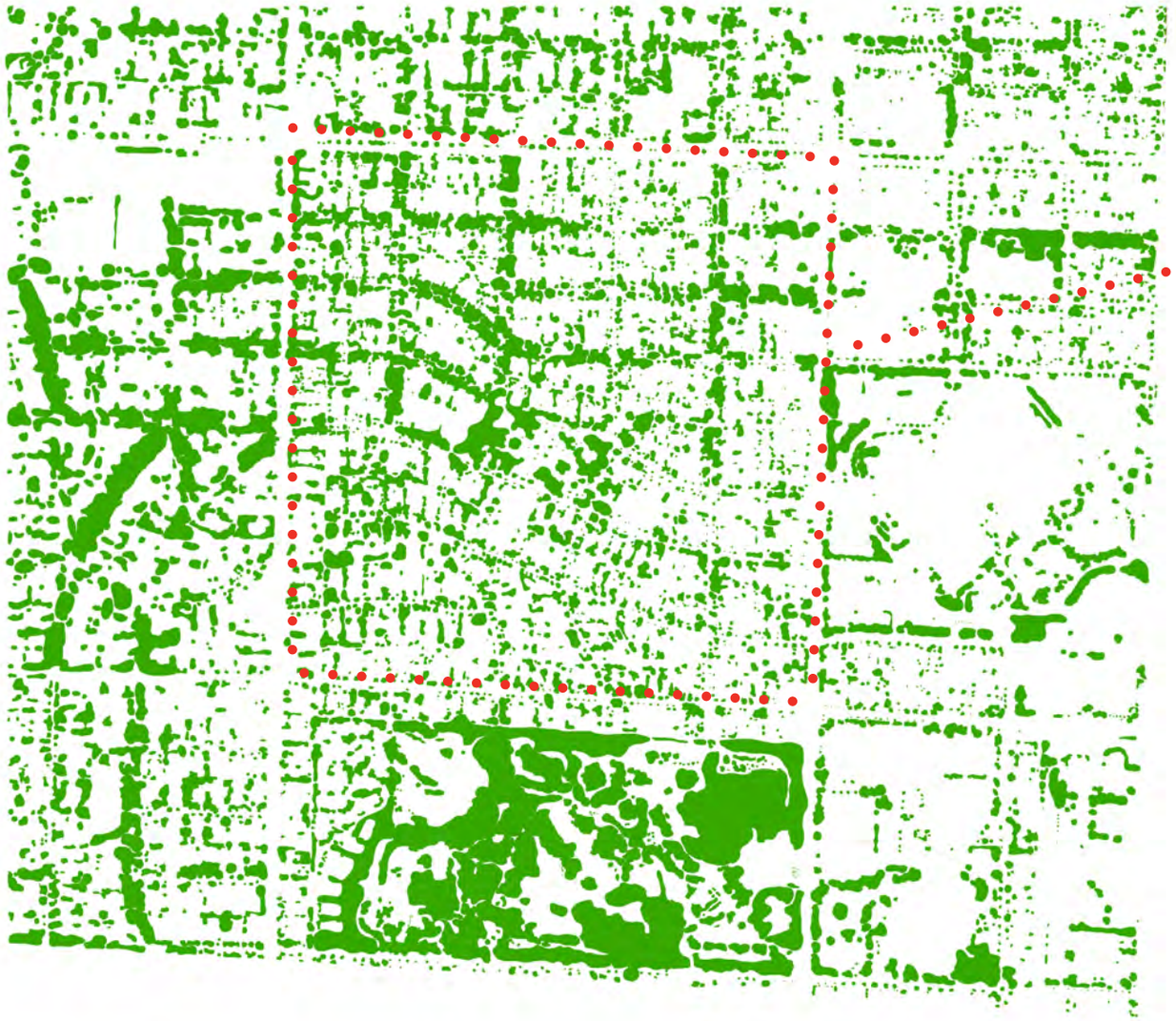
~ 2/3 dedicated to urban canopy

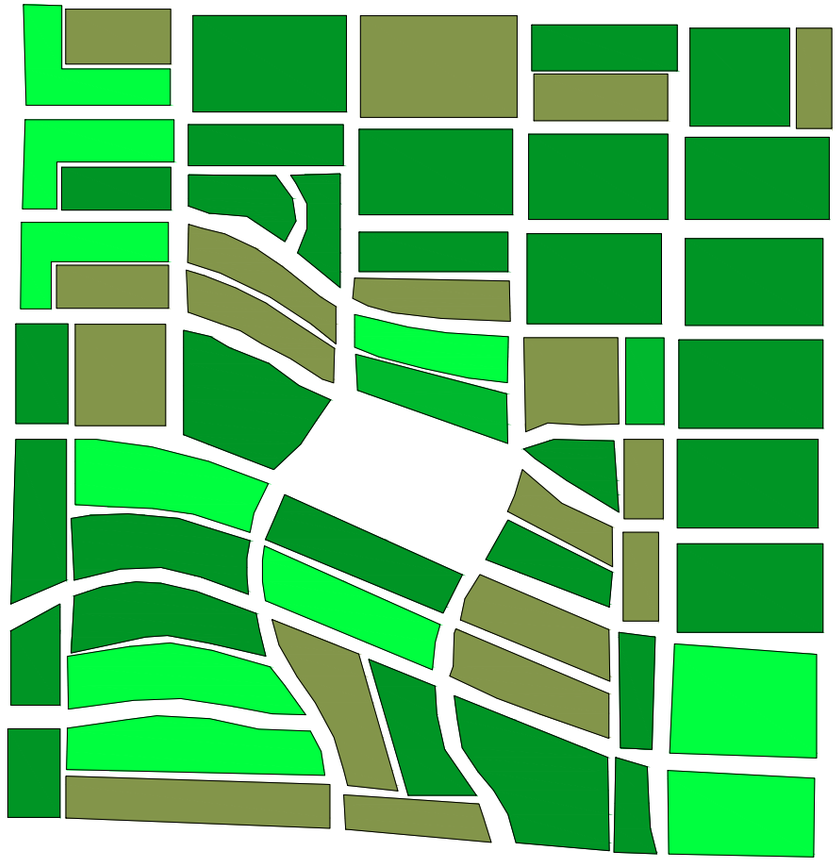
~ 1/3 dedicated to dense forest providing plausible habitat

The urban forest is predominantly located at VanDusen park albeit the wide street characters of 2nd Shaughnessy to contain sections of broad canopy covered streets.

28%

green1

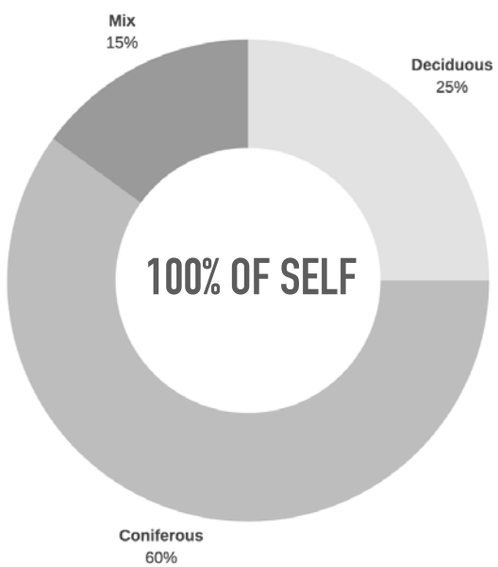


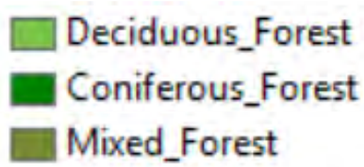


GREEN2 PRIVATE REALM :

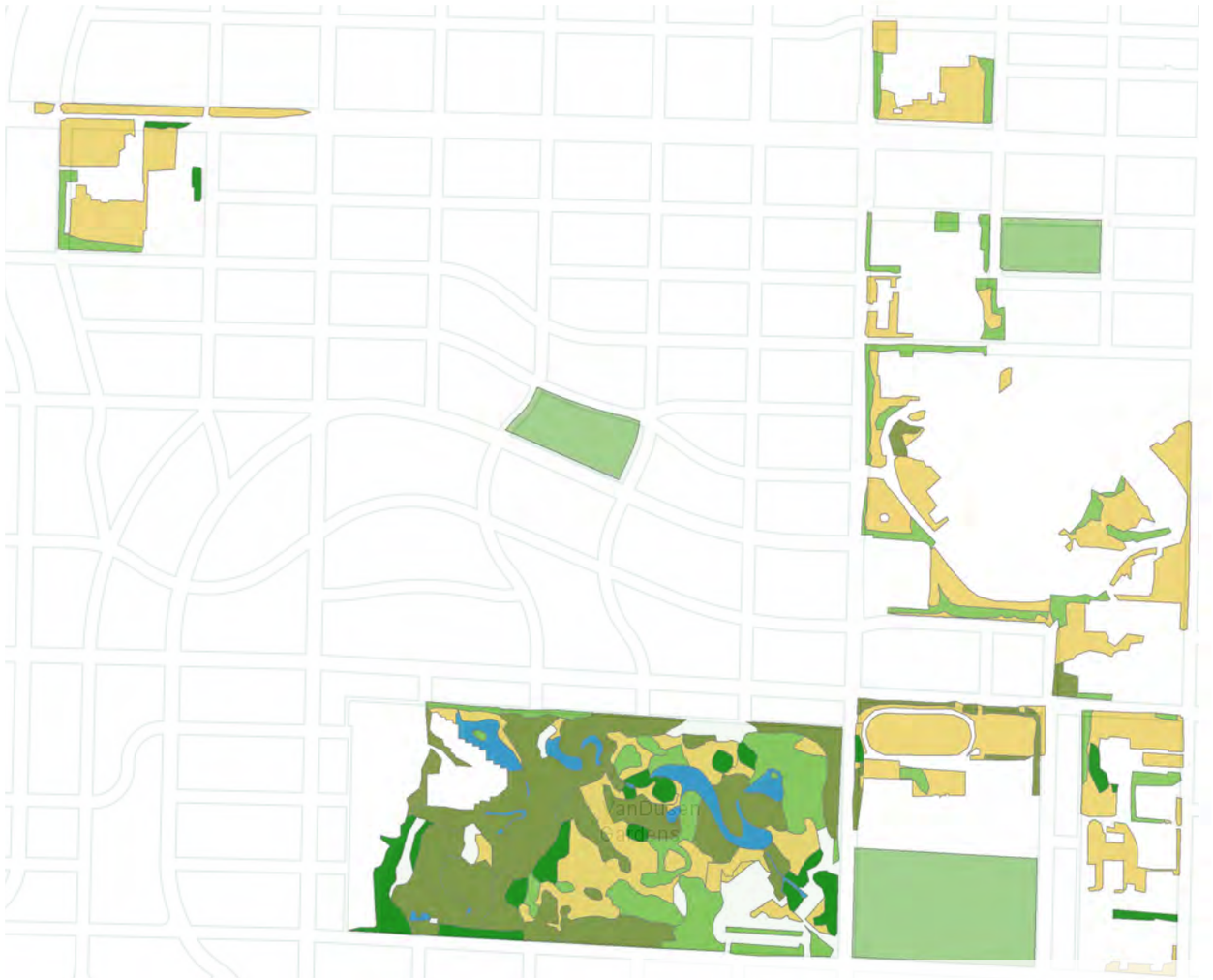
Coniferous trees were found predominantly on private property. Potentially due to:

-size - soil space requirements - provision of privacy





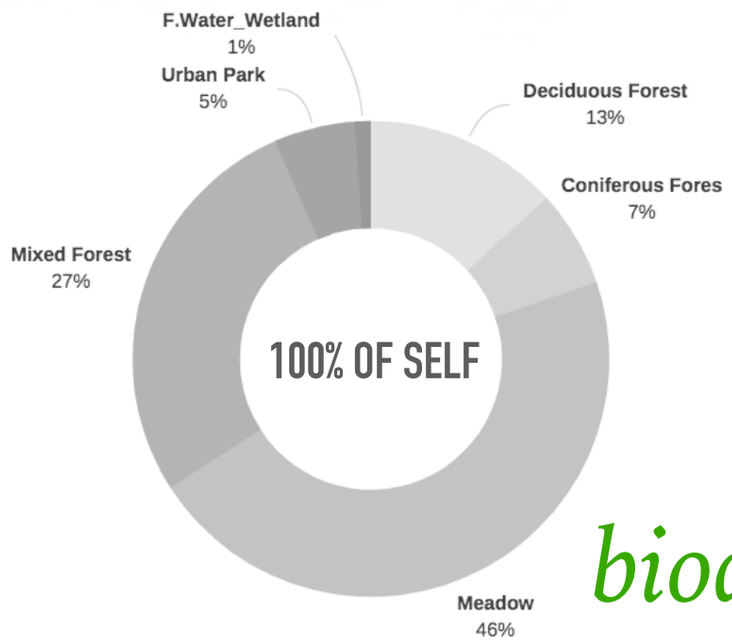
green2



BIODIVERSITY HABITAT TYPES* :

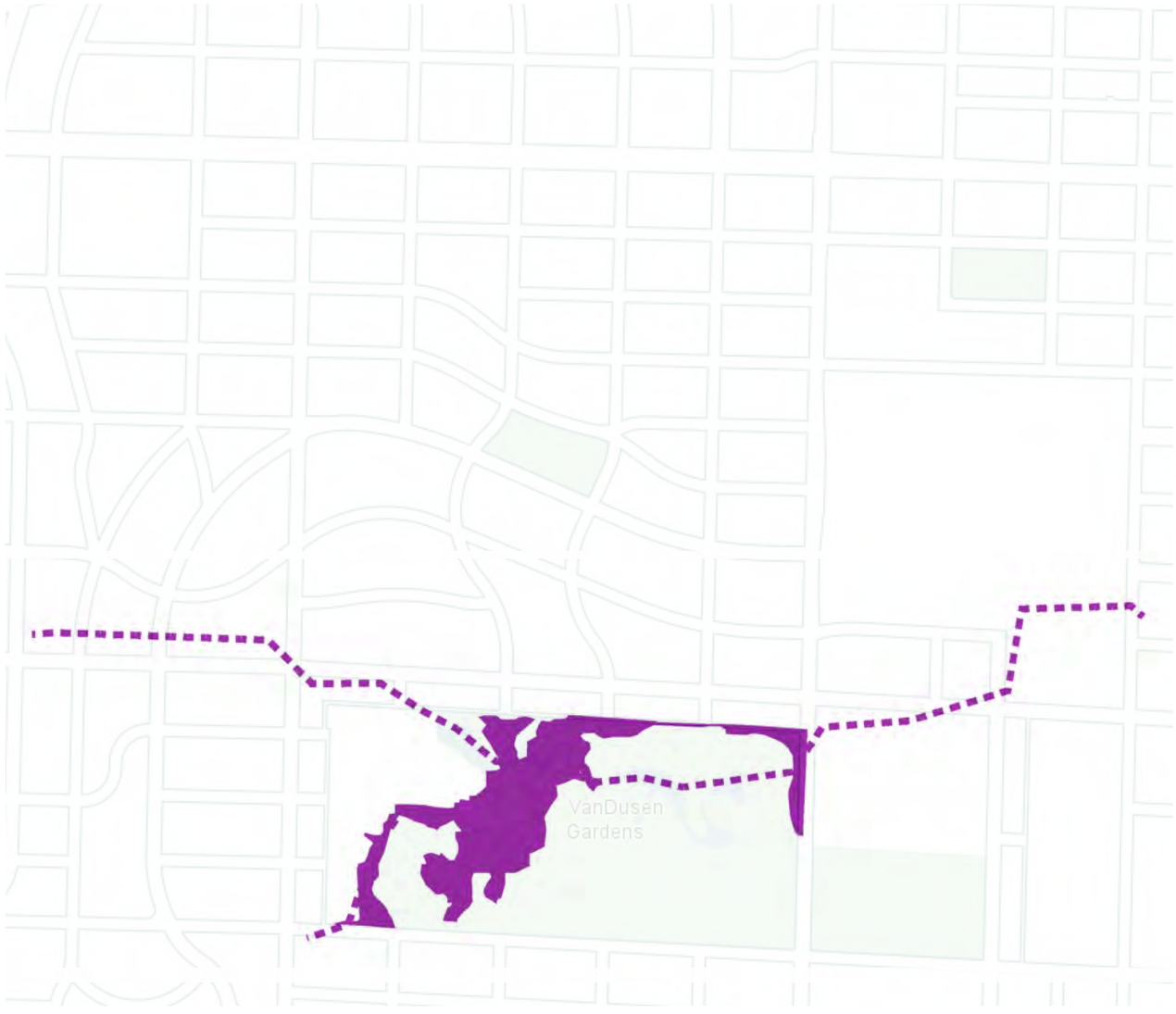
VanDusen Gardens provides a significant mixture of a variety of habitat types while institutional, commercial and public park spaces provide low diversity of meadow and park grass land rendering an overall negative habitat impact due to the intrinsic maintenance requirements.

** Analysis presented on public land*



25%

biodiversity : habitat types



BIODIVERSITY HABITAT* :

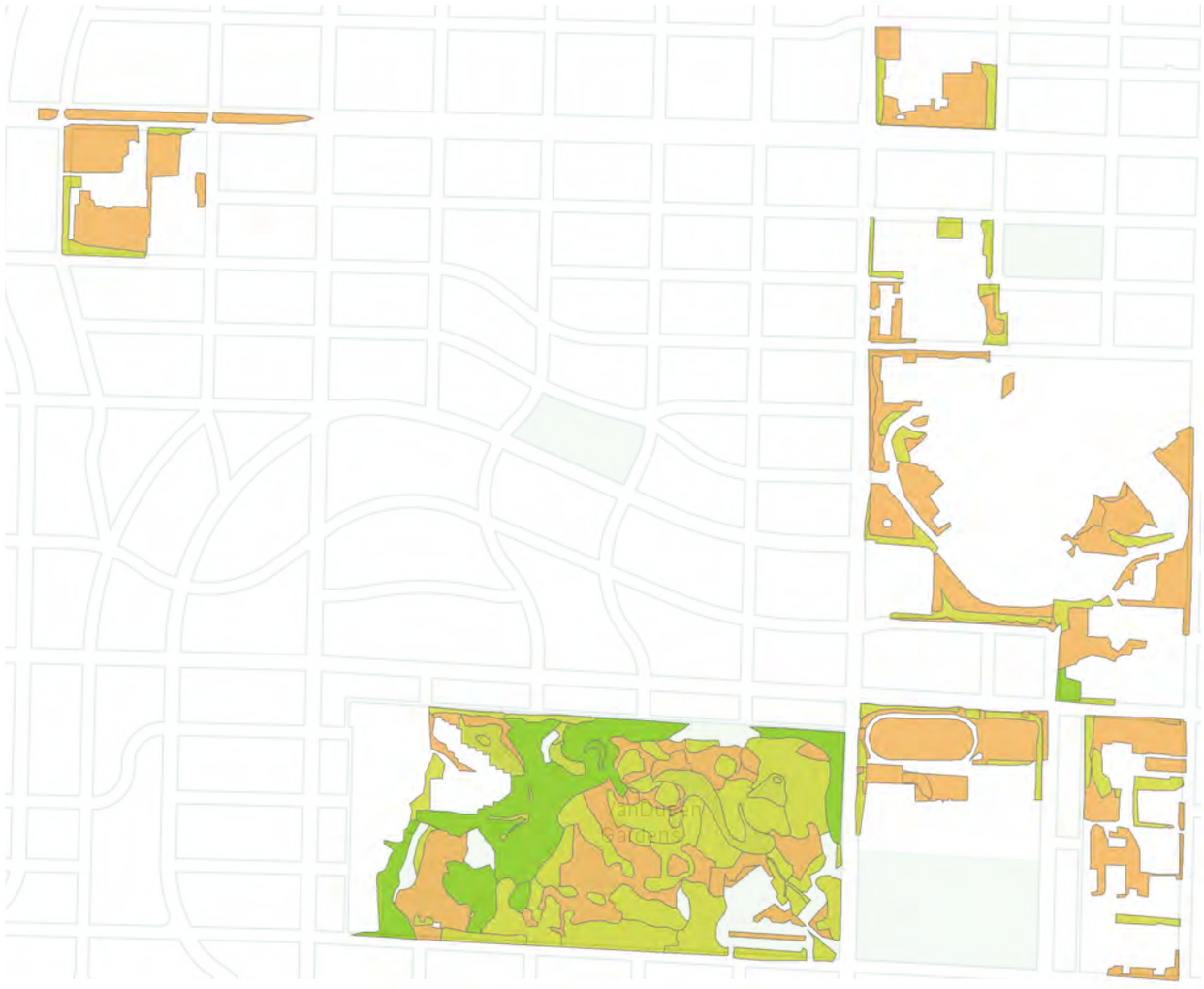
Providing the analysis on habitat types previous, VanDusen Gardens is the hub previsionary of valuable habitat area. There a few habitat hot spots on private property not indicated here and will be included in phase II of this research.

** Analysis presented on public land*

Habitat

4%

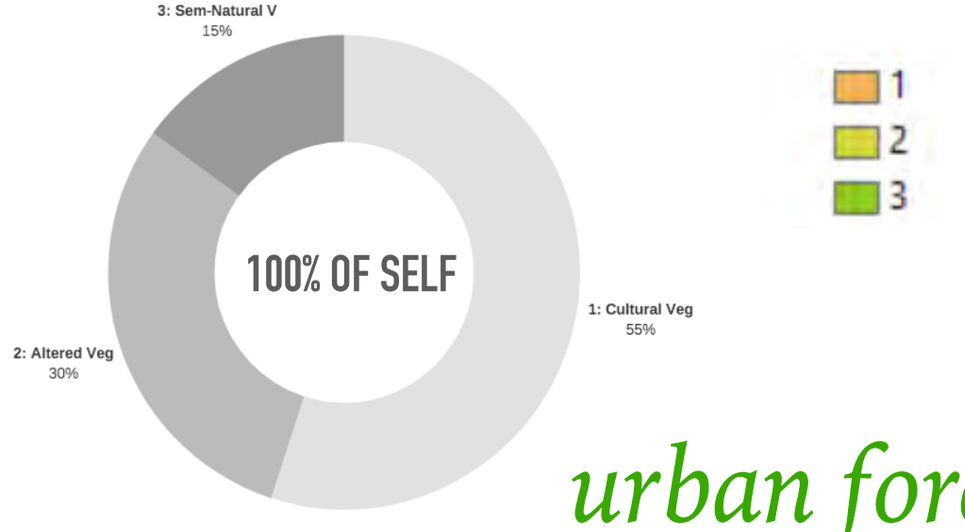
biodiversity : habitat



NATURALNESS :*

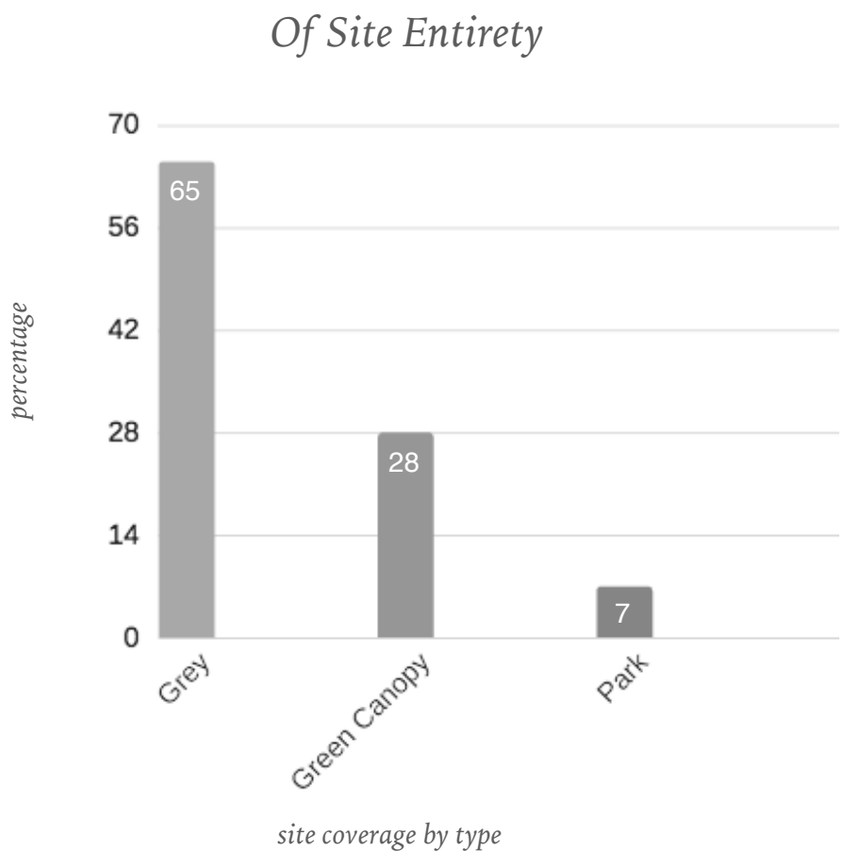
Irregardless of the value of VanDusen Gardens, it contains low native vegetation and is heavily maintained leaving little room for naturalness to occur. This too is more intensely represented here in the institutional and commercial spaces.

** Analysis presented on public land*

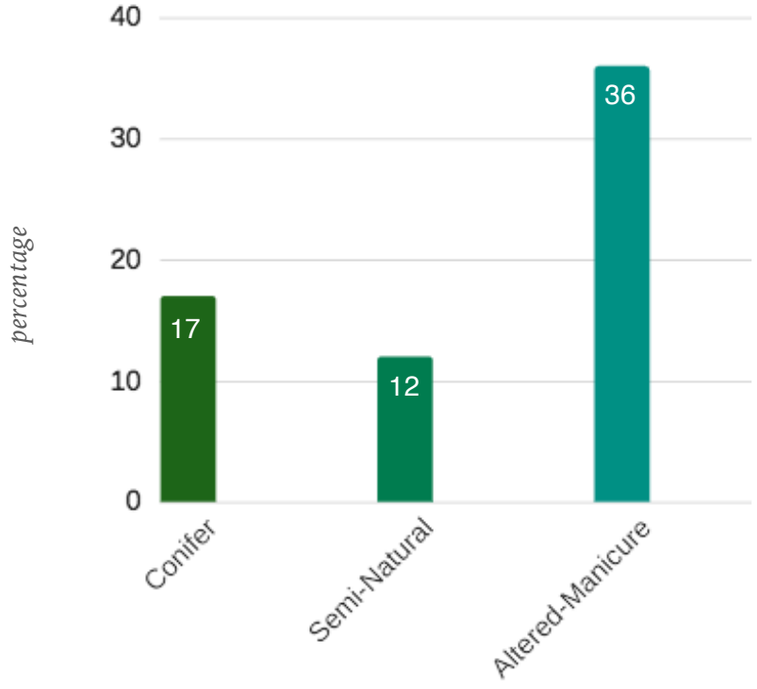


20%

urban forest : naturalness



site coverage by type



site coverage by green infrastructure

OVERALL SITE FINDINGS:

1. *Zoning plays a large part in the type and quality of urban forest and coverage, city By Laws allow 60% impermeable site coverage*
2. *Although VanDusen Gardens is previsionary in the most abundant habitat valued area of the site, it too maintains a low level of naturalness and wild habitat*
3. *Institutional and commercial spaces contain little to no room for vegetative cover, even when they do, most species are struggling to stay healthy. These areas have the most potential for intervention*
4. *The highest concentration of coniferous urban forest is found on private property*

Site 11

Queen Elizabeth Park

Queen Elizabeth Park

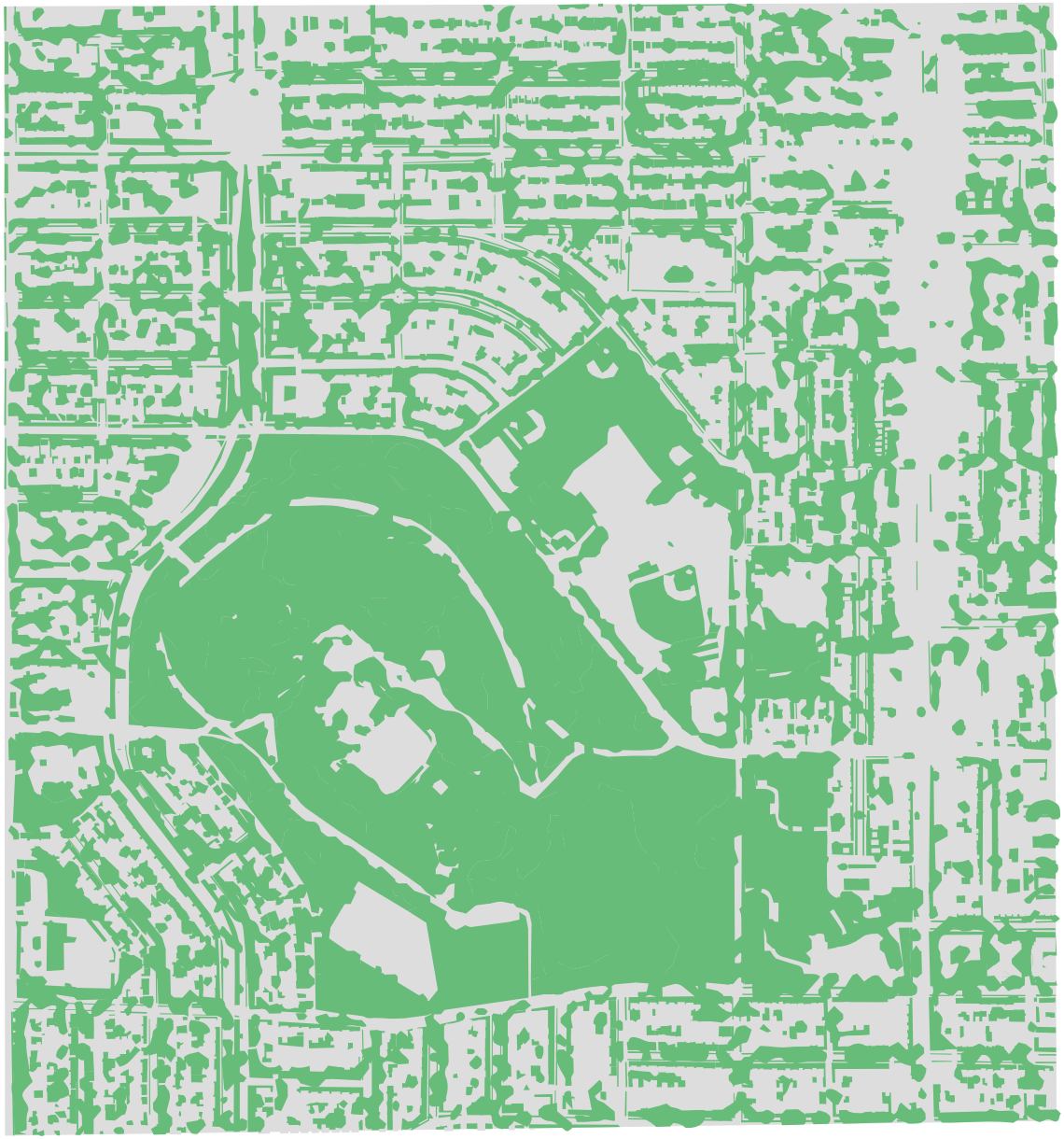
Biodiversity Hotspot
Green asset

Main Arterials

Commercial services
Densification in progress

Residential Fabric

Largely single-family homes

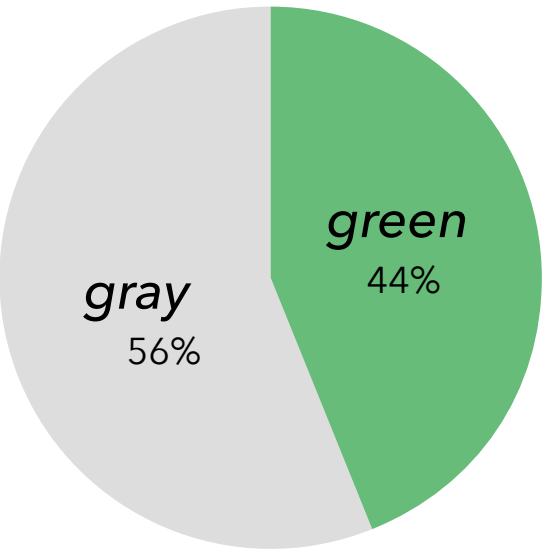


Green Fabric Grey Fabric

Green vs. Gray Fabric

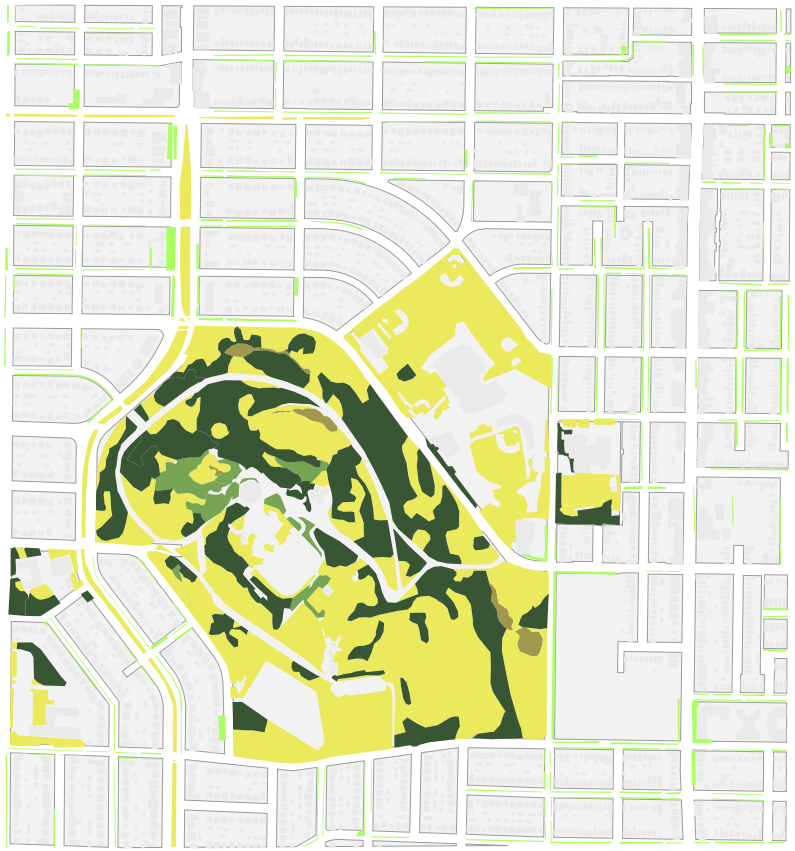
44%

of the site is *green*



Green Fabric

Public Greenery



Private Greenery

Forest

Trees

Shrubs

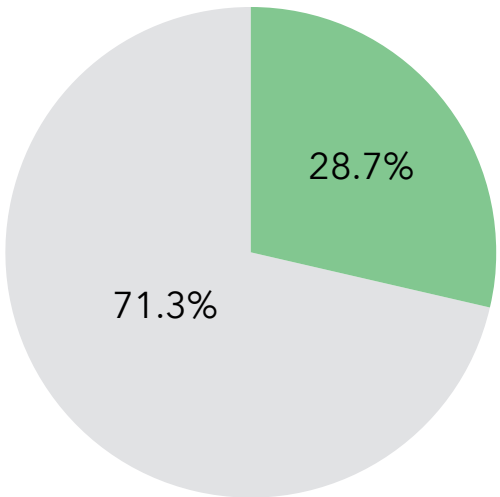
Sparce Vegetation

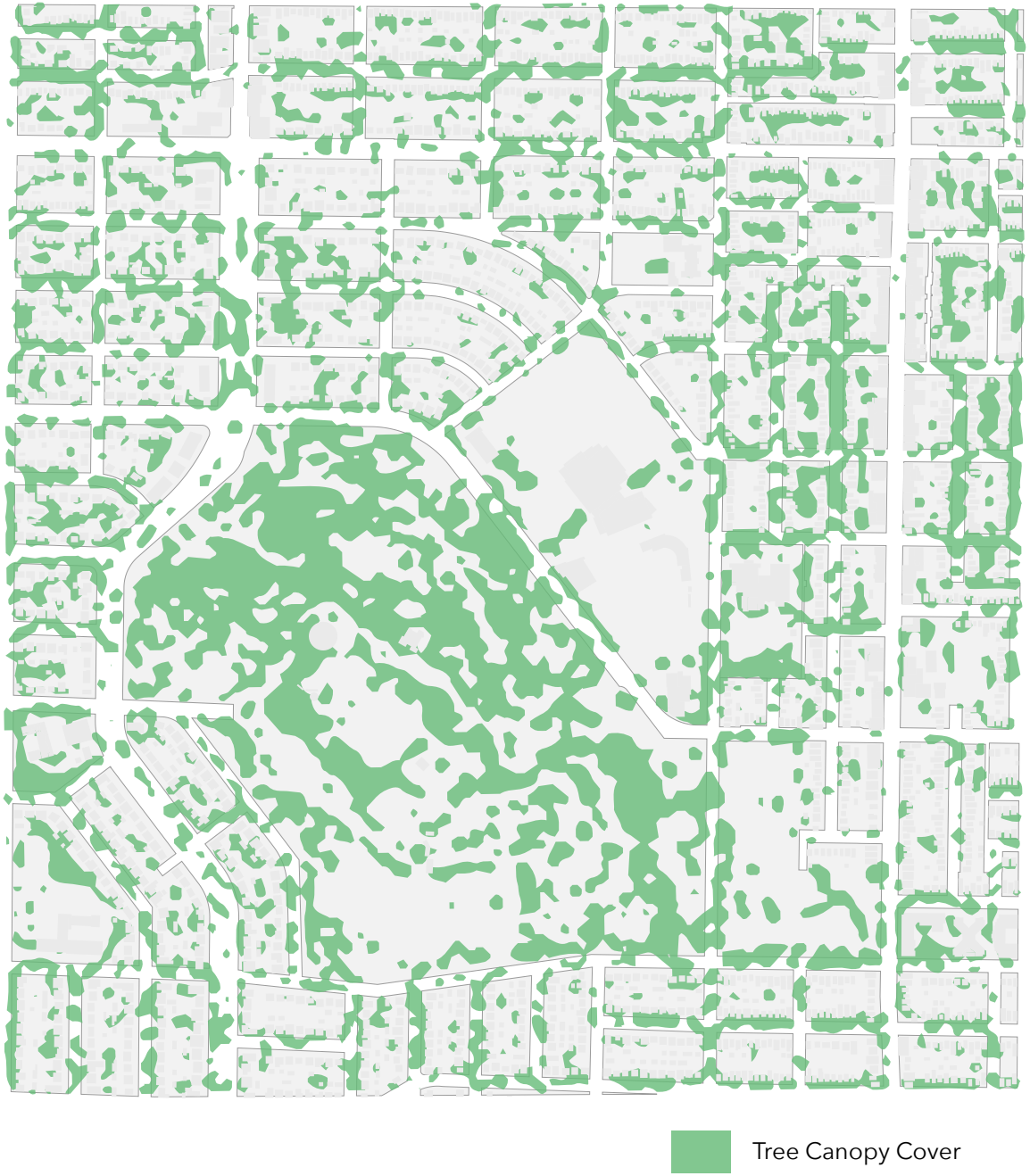
Herbaceous

Urban Forest Canopy

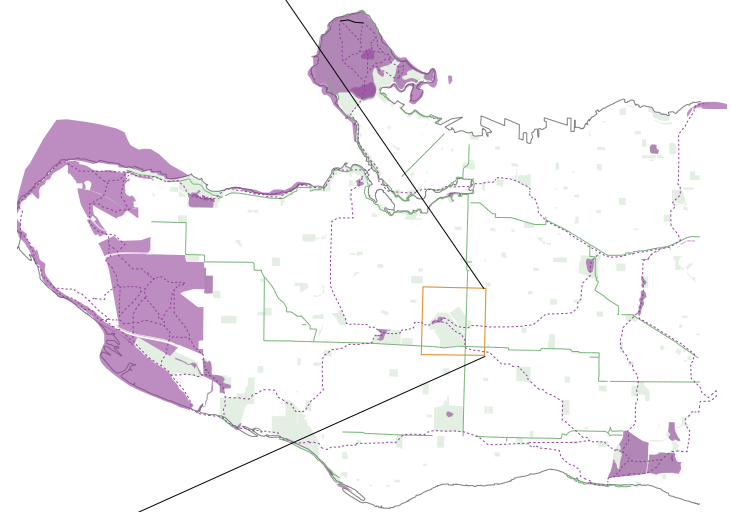
28.7%

tree canopy cover





Biological Diversity and Connectivity



Biodiversity Hotspots

Possible Wildlife Connections

High Biodiversity

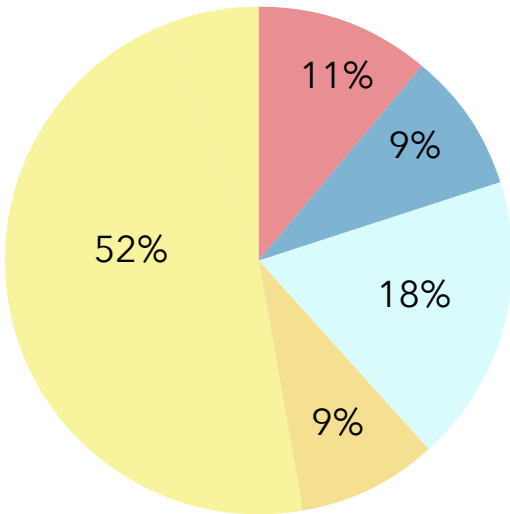
Low Biodiversity

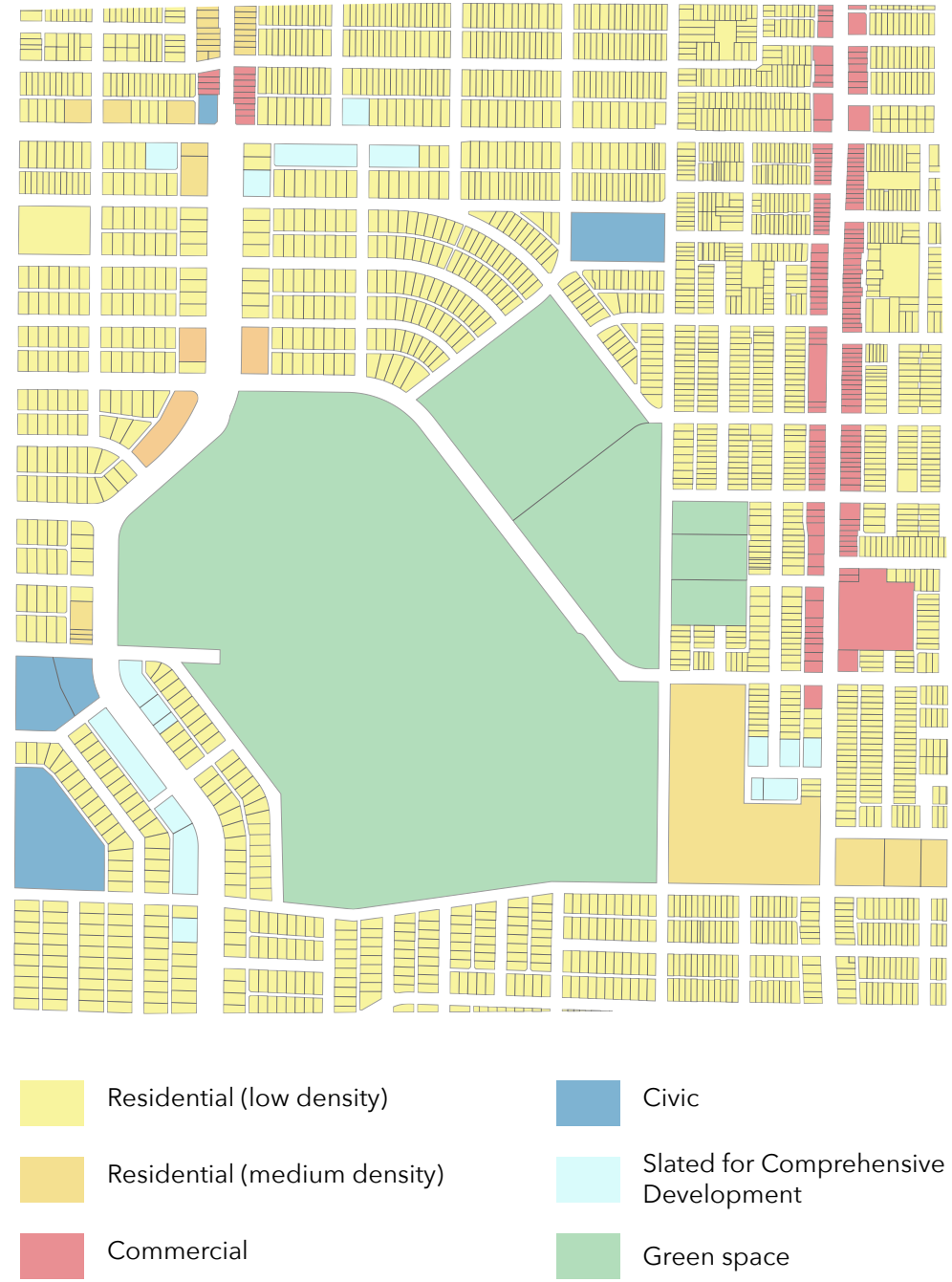
Urban Fabric

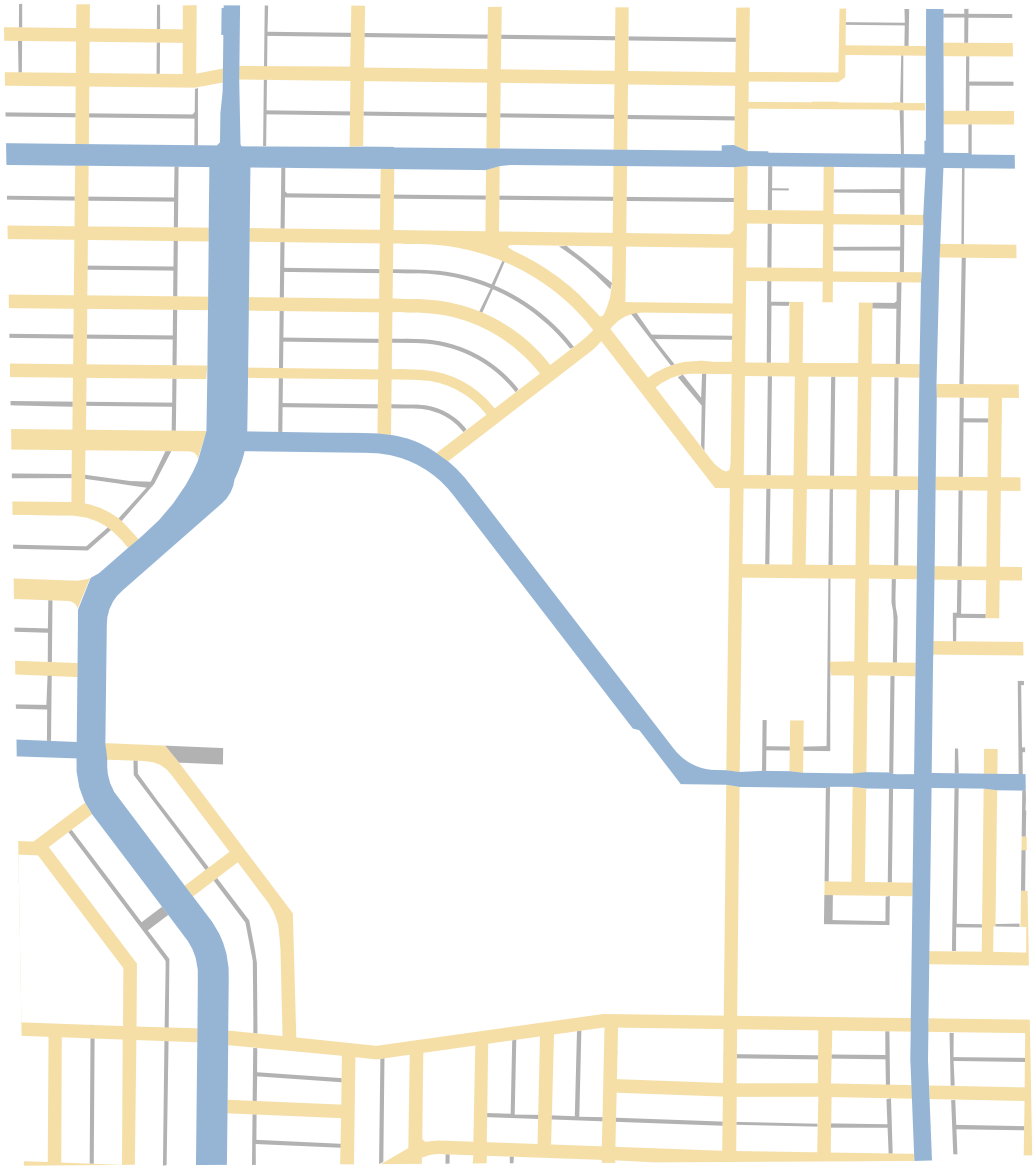
52%

of area zoned for ***low density residential***

Zoning Distribution







Arterials

Residential fabric

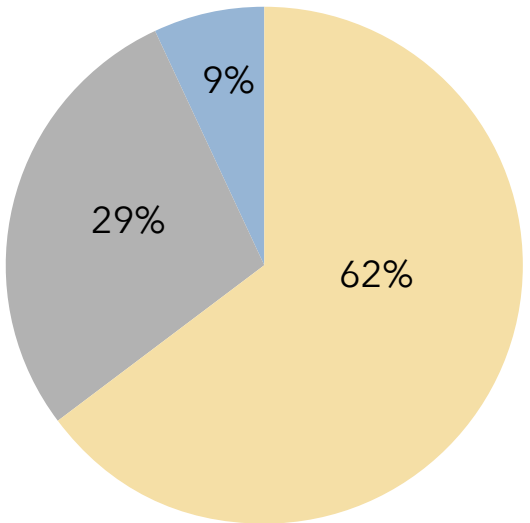
Alleyways

Street Network

62%

of the public street network
is ***residential fabric***

Street Area Distribution



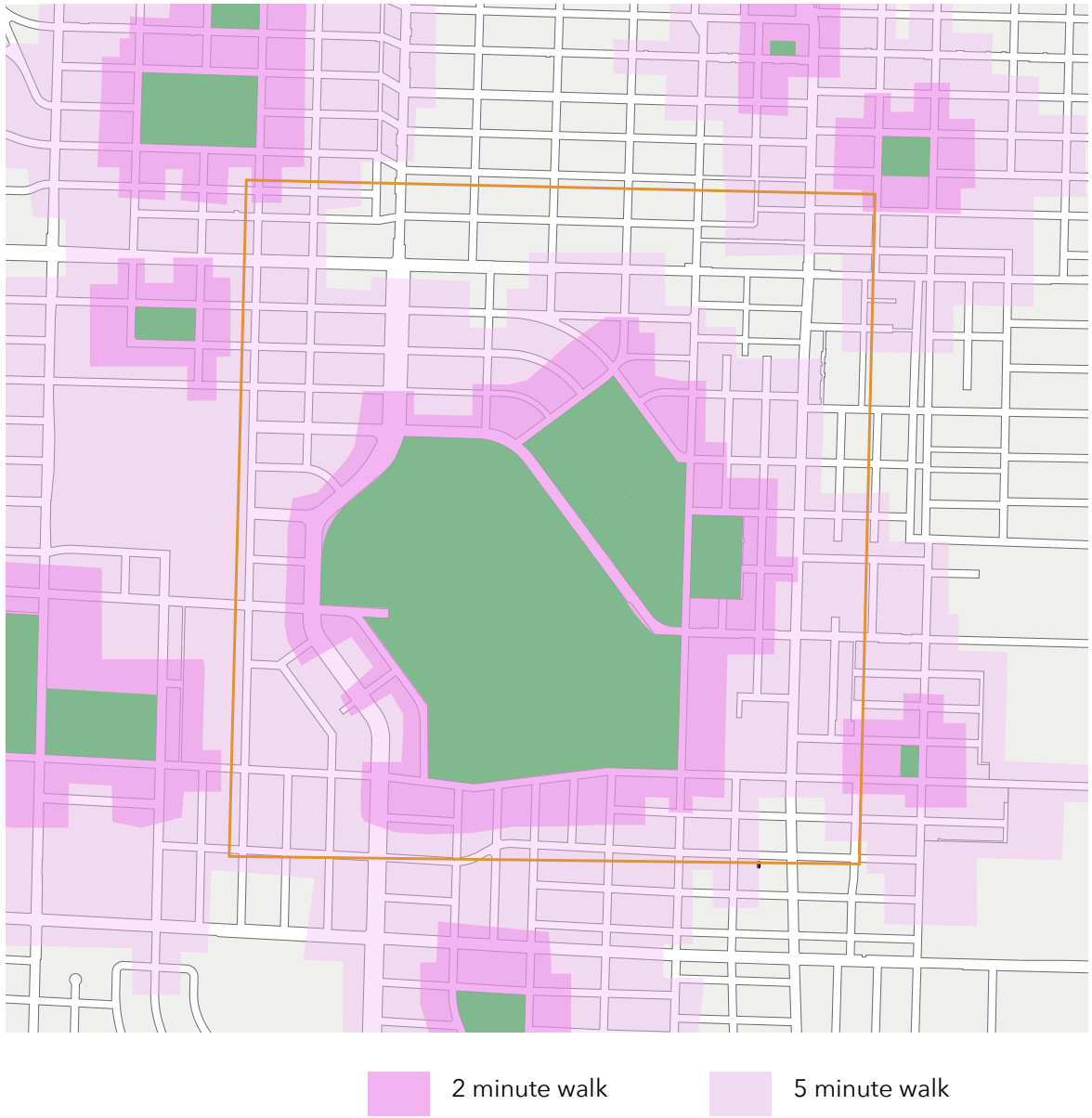
Green Social Effectiveness

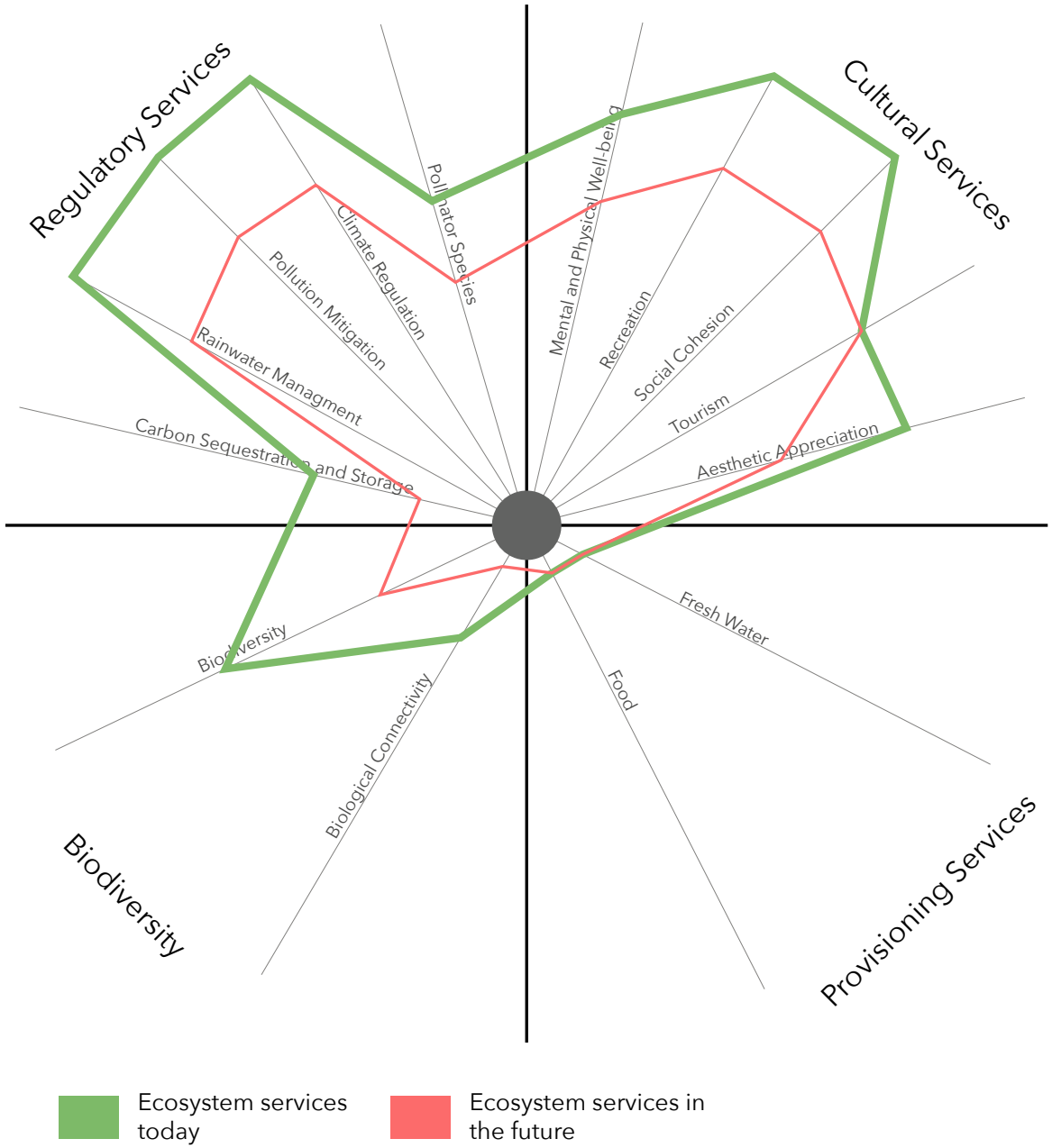
63.1%

of households > *2 minute walk* from dedicated greenspace

28.8%

of households > *5 minute walk* from dedicated greenspace





Ecosystem Services

Future Trends

Increased Temperature
Increased Precipitation
Densification
Increased Social Needs

Key Issues and Perspectives

Biological Diversity

Improve diversity on private land
create functioning biological connections

Environmental Services

Improve rainwater management
Impliment green infrastructure

Recreational Services

Strengthen recreational facilities at Queen Elizabeth Park
Improve access to green spaces

Tiffany Chin
Teresa Maddison
Pantha Vohra
Chelsea Wang

City of Vancouver 12
Cambie Corridor
Oakridge Mall to Langara Golf Course

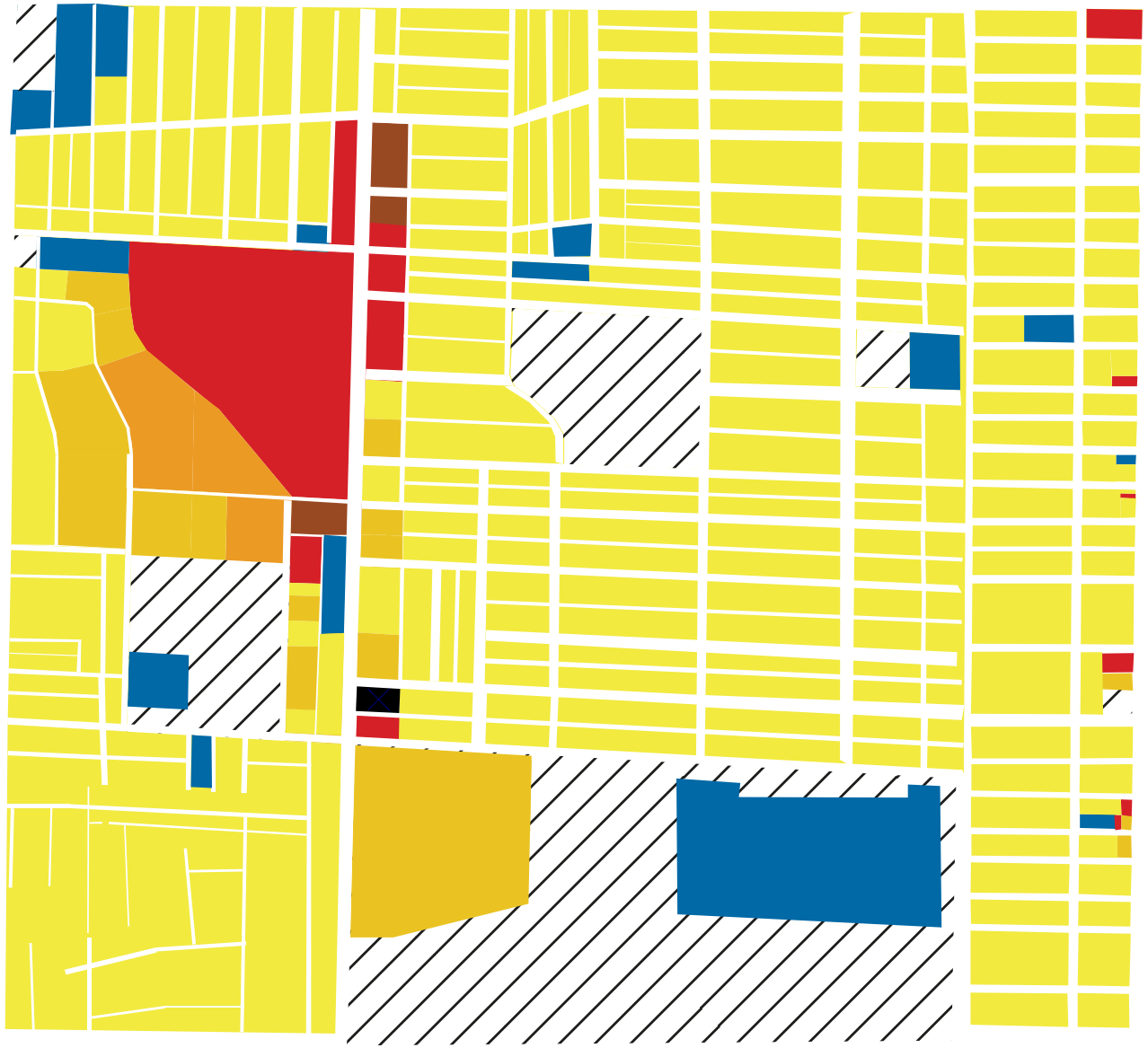
Land use

10.43 km

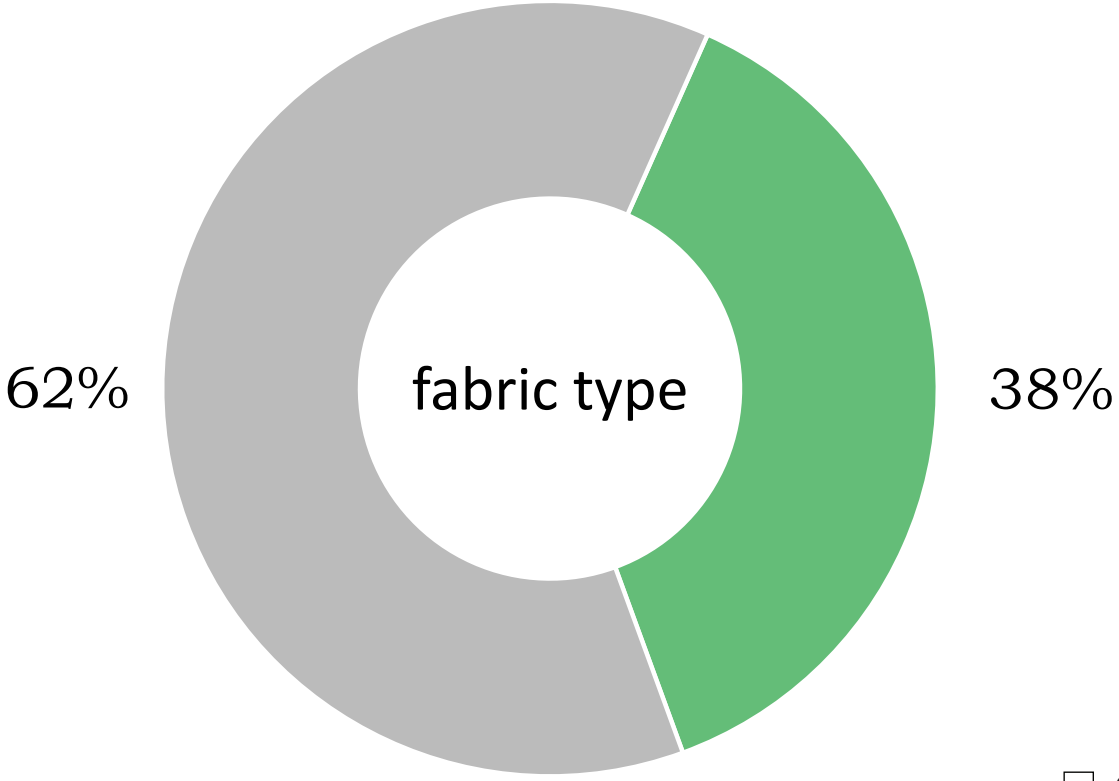
bike paths

3.87 km

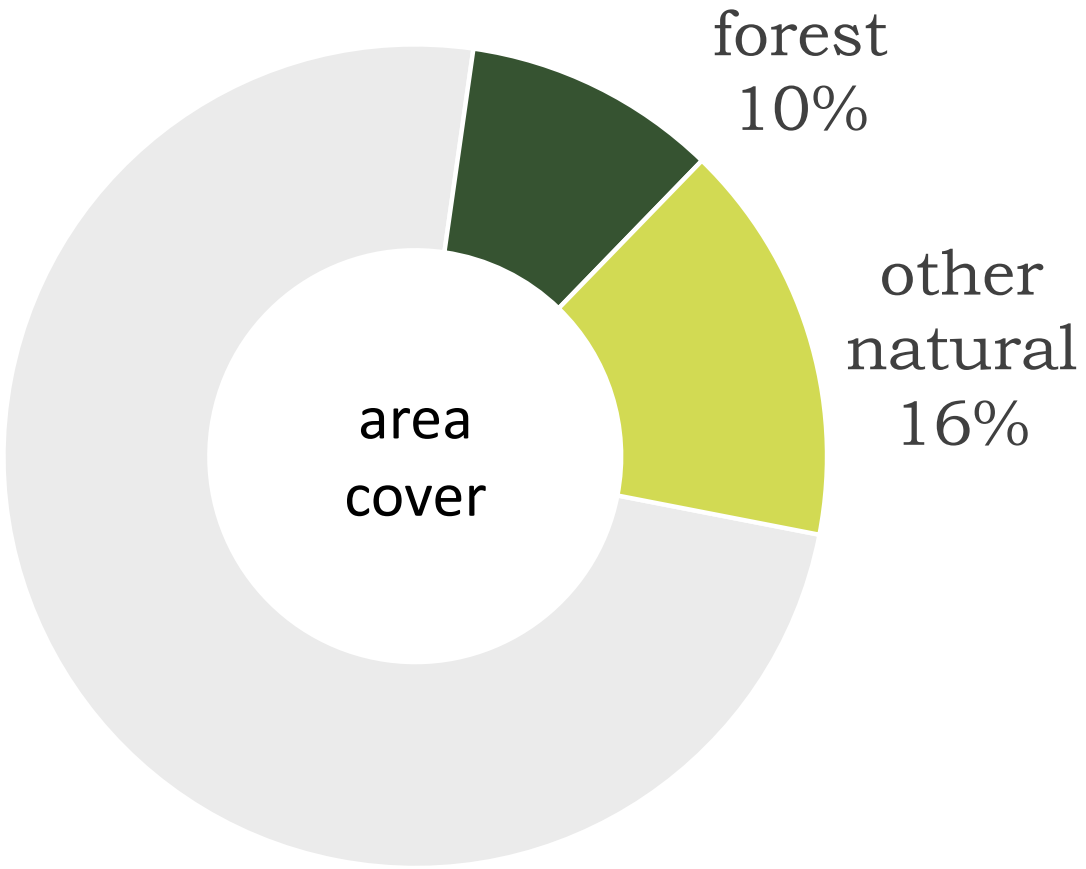
walking trails



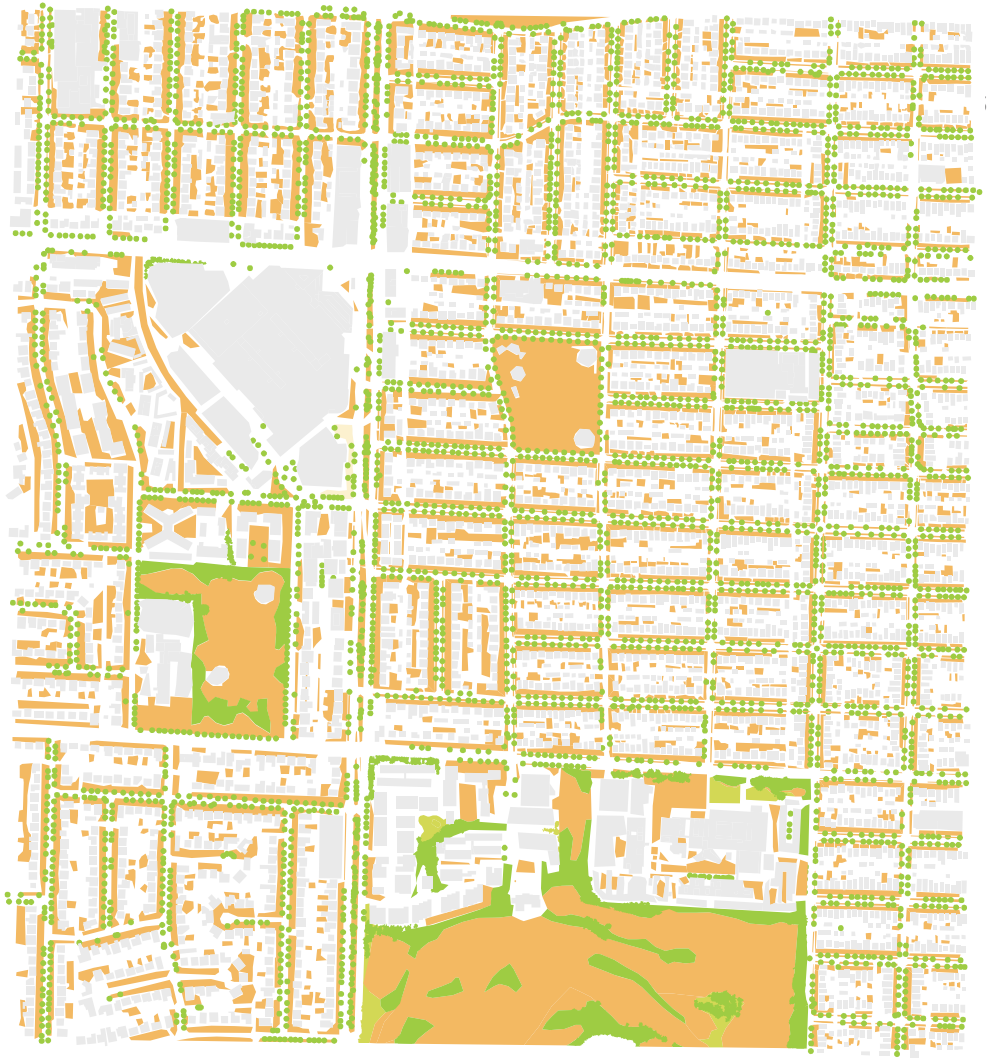
Land cover



Vegetation type



Vegetation naturalness



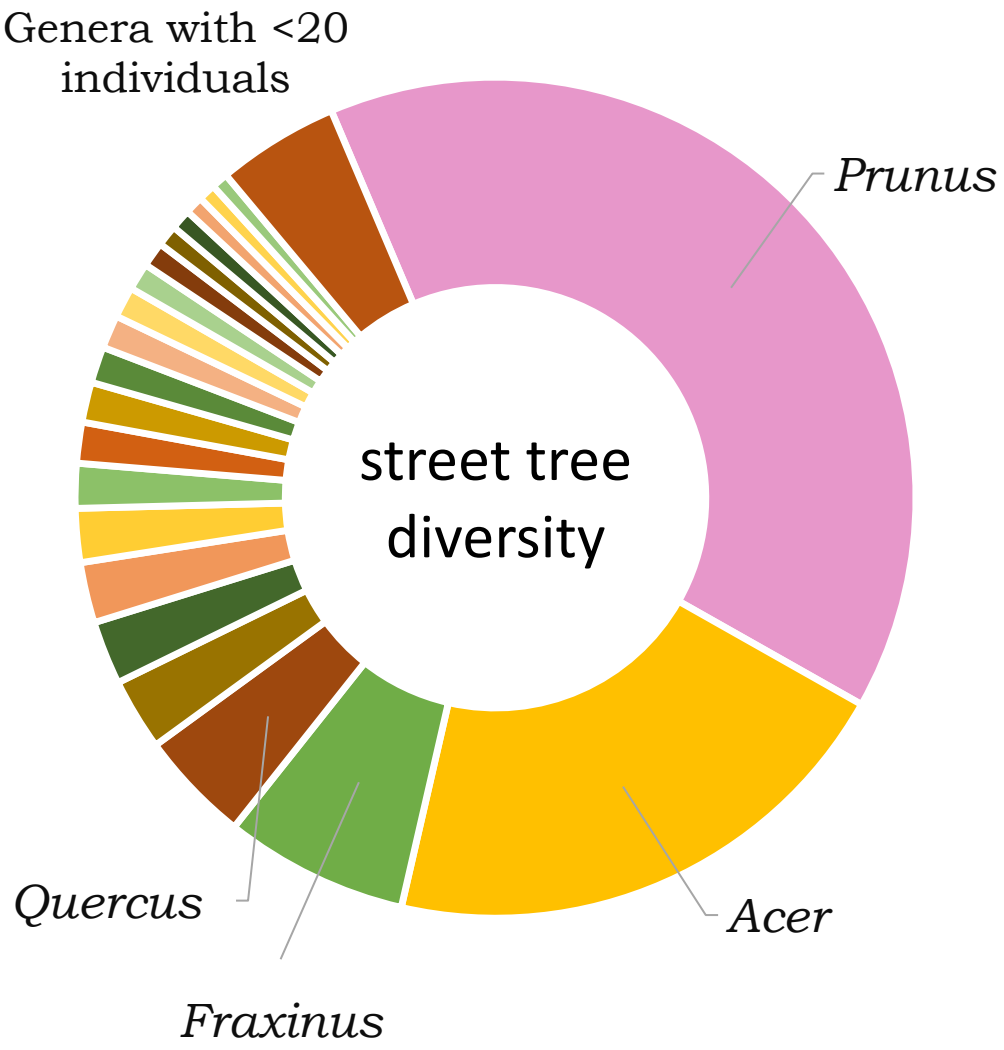
32%

within 100m of nature

92%

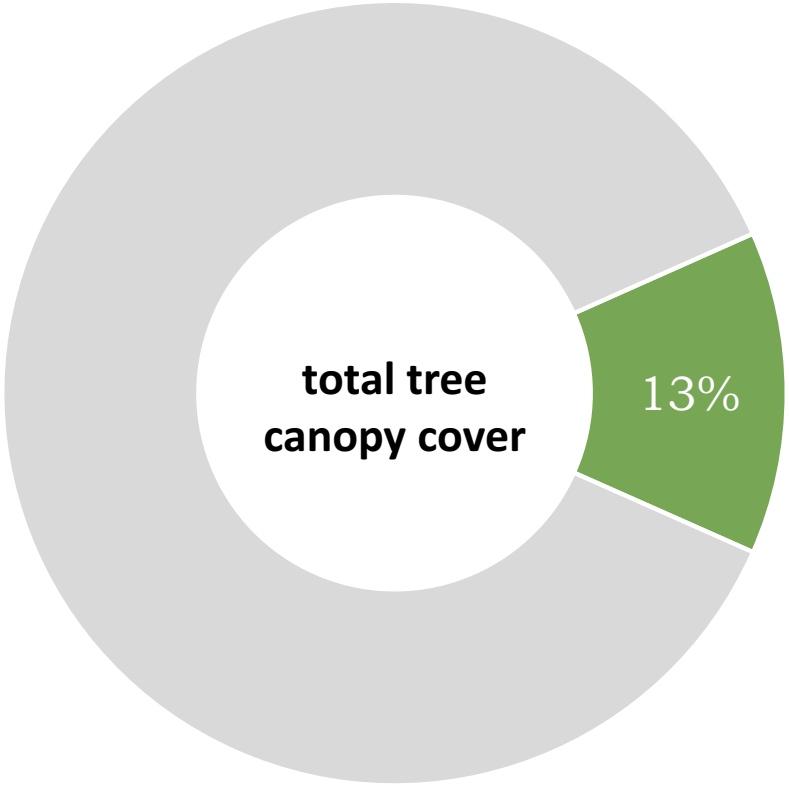
within 400m of nature

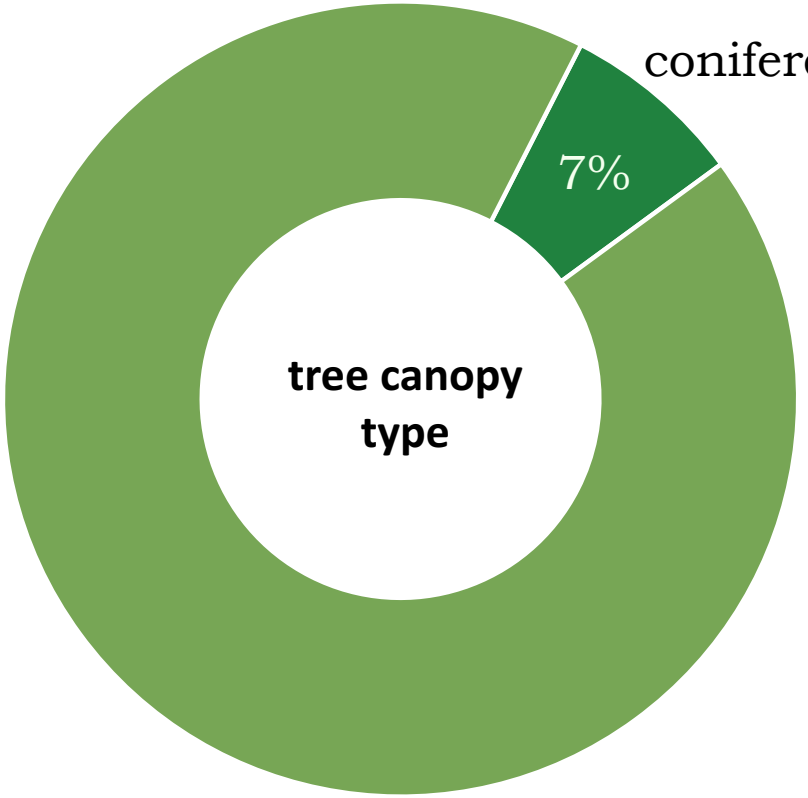
Trees


Genera with <20 individuals
Prunus
street tree diversity
Quercus
Fraxinus
Acer


Deciduous Canopy
Evergreen Canopy
Mixed Canopy

Tree canopy cover





37 ha

tree canopy cover

Biodiversity & habitat types

0.4%

with high habitat value

20%

with moderate habitat value

Site 13 | Cambie Corridor

LARC 444/553
Project 2 | Part 1 Presentation
Vanessa Aragona, Alex DeRoehn, Jessica Lee, Michelle Whiticar

Includes

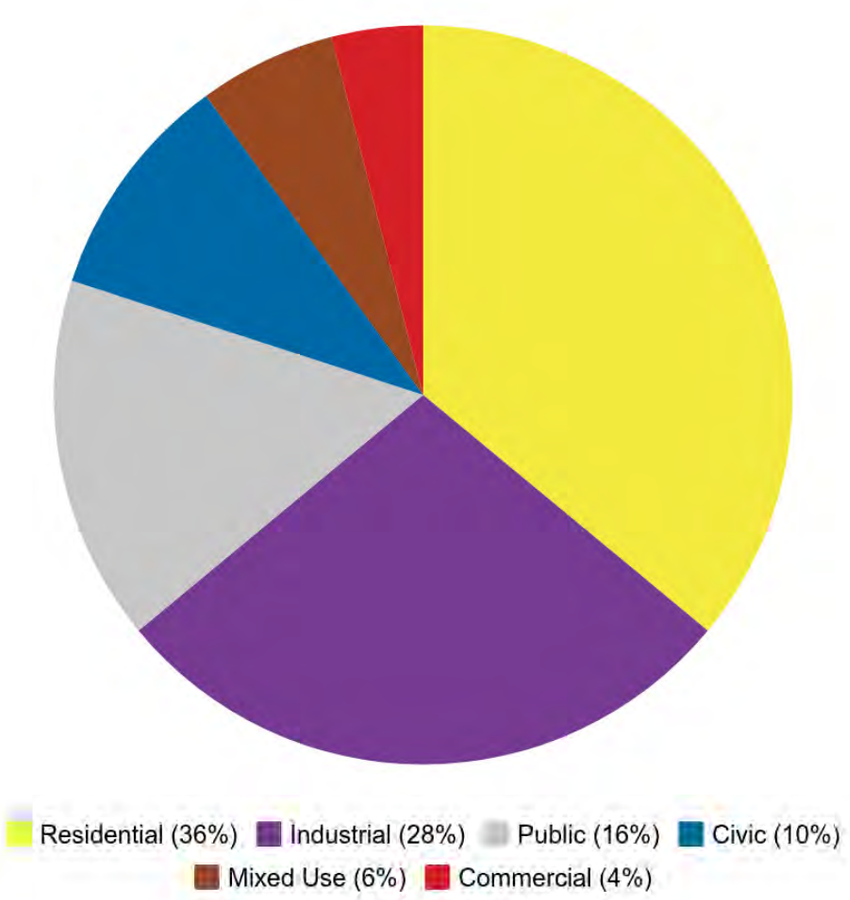
Langara Golf Course
Marine Drive Canada Line Station
Marine Drive industrial area

Land Use

The land uses are highly fragmented and isolated from one another.

28% is Industrial Land

Land Use Break Down

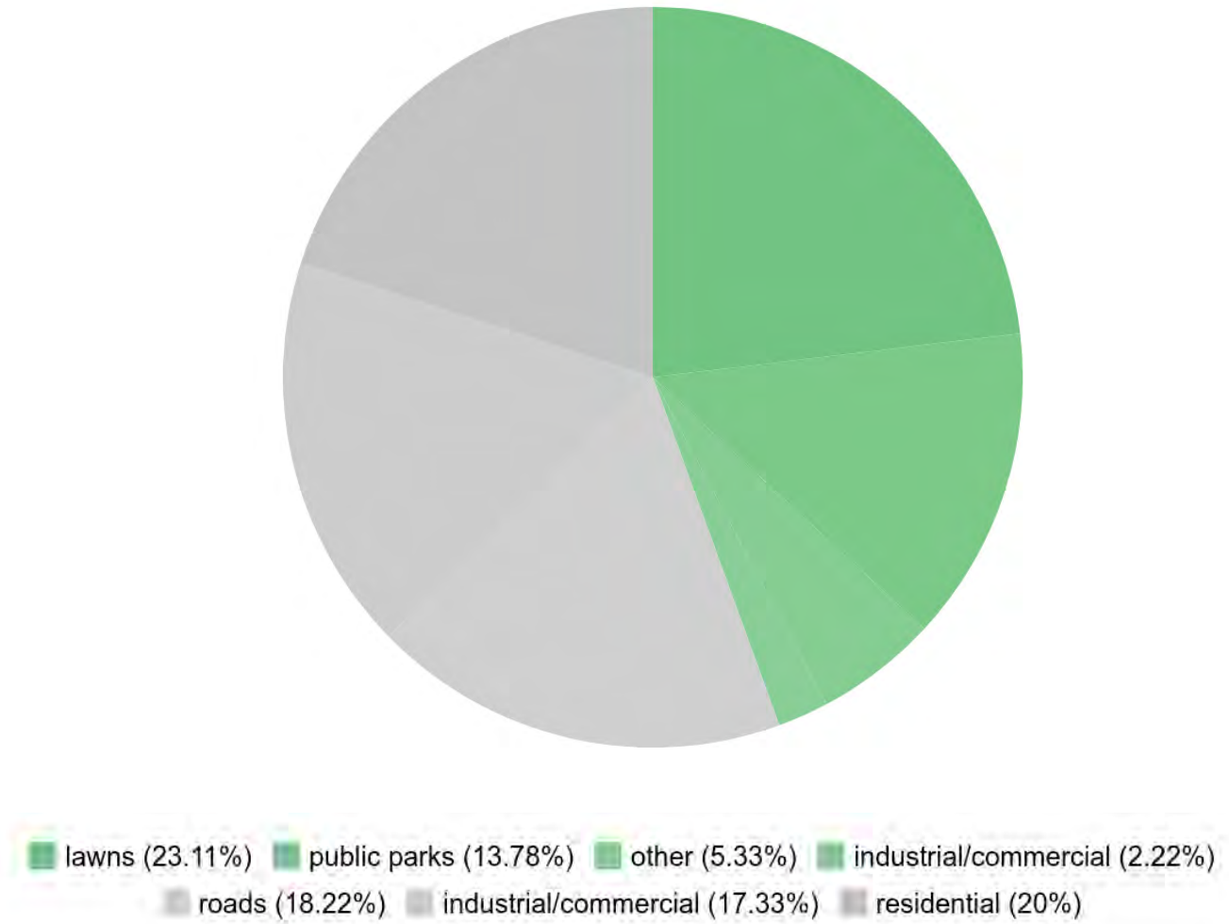


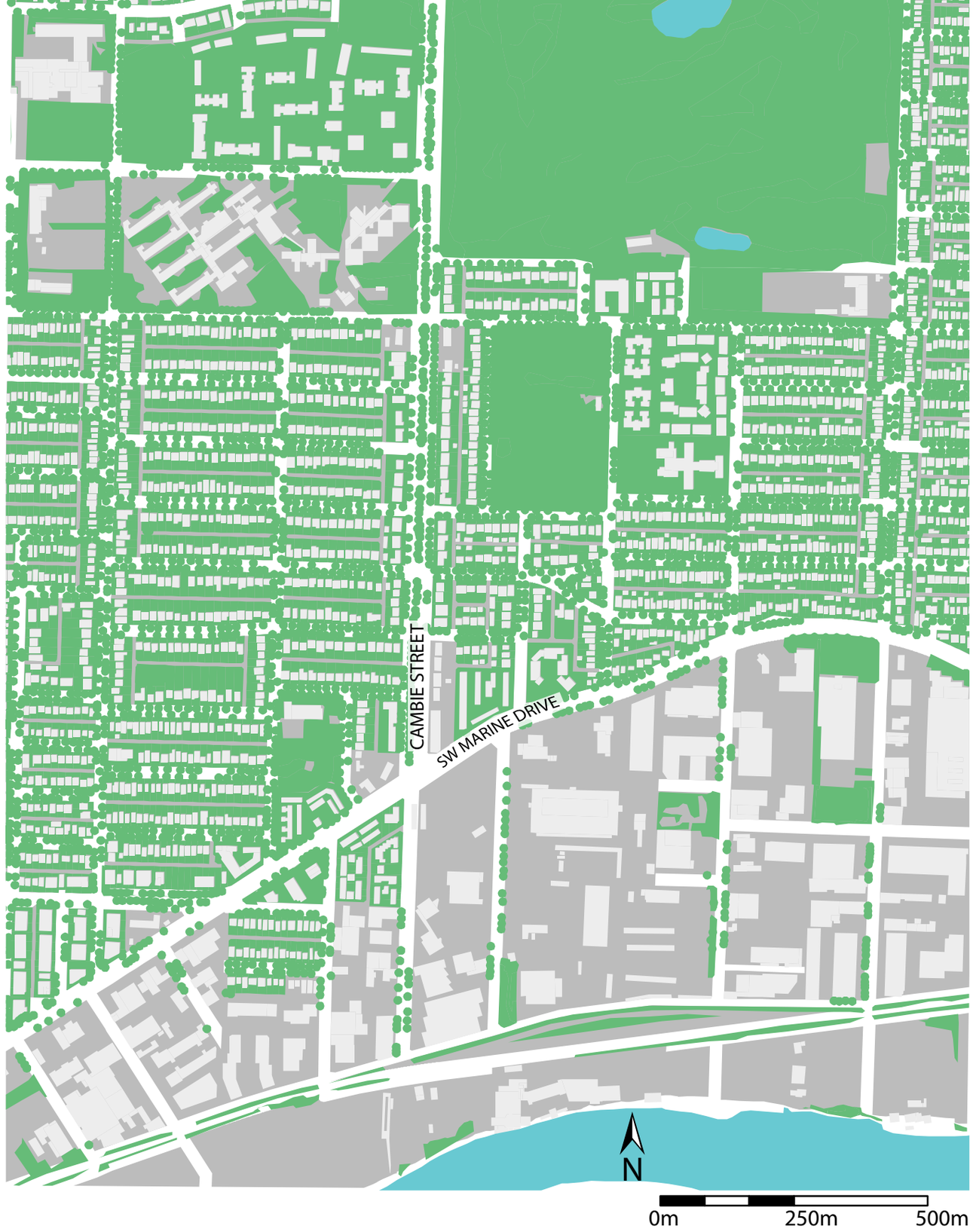
Green vs. Grey

More than half of our site is grey space, attributed to industrial land uses and streets.

60% Grey

40% Green





Vegetation Type

Most vegetation in our site is focused north of SW Marine Drive.

Forest Cover +
Natural Vegetation
concentrated around
Langara Golf Course.

Site Composition

78%	Herbaceous
19%	Forest
2%	Shrub
1%	Water

Proximity to Nature

Residents and workers within the area are at least a

5 MINUTE WALK (400 metres)

from nature.

This 100-metre and 400-metre indicator highlights the walkability of this community

66%

OF SITE WITHIN

100 Metres of Nature

Proximity to Nature

- 100m Buffer
- Riparian
- Freshwater Wetland
- Natural Vegetation
- Semi-Natural Vegetation
- Altered Vegetation

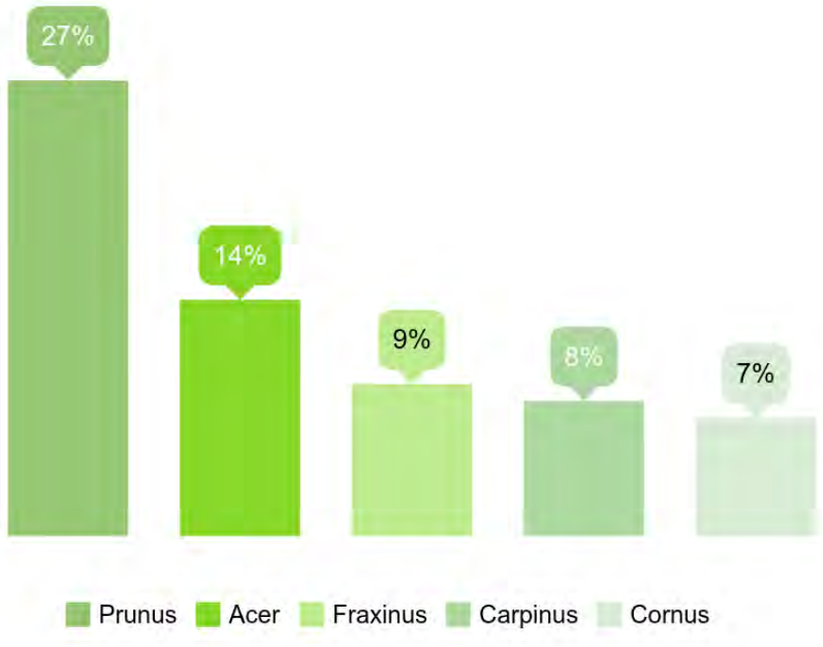
Tree Canopy

The tree canopy dissipates where land use is primarily industrial.

95%
Deciduous

5%
Coniferous

Top 5 Tree Genuses



Tree Canopy Composition

- Deciduous Canopy
- Evergreen Canopy
- Mixed Canopy
- Forest

Street Trees

Trees Planted in Last 30 Years

Tree Diameter & Abundance

Biodiversity

This neighbourhood is lacking in biodiversity hubs as well as natural forest land throughout the site.

A large range of

NATURAL HABITAT CANNOT EXIST

due to large

AMOUNT OF GREY SPACE

Site Composition

1 Of Habitat Hotspots

11 Of Habitat Sites

1.6 Kms Of Habitat Corridors

5% Of Area Has Habitat Value

Challenges

Land Use: Industrial Land

60% of our site is grey

Limited vegetation in industrial areas

Transportation Network

Cambie Street & SW Marine Drive act as barriers

Biodiversity

Lack of diverse habitat areas

Little diversity in tree species

Oppertunities

Area of Rapid Development

Marine Gateway
Greenest City initiatives

Green Improvements

Green infrastructure
Tree planting