

UBC School of Architecture and Landscape Architecture
LARC 444/553 Green Network Planning



GREEN NETWORKS- VANCOUVER

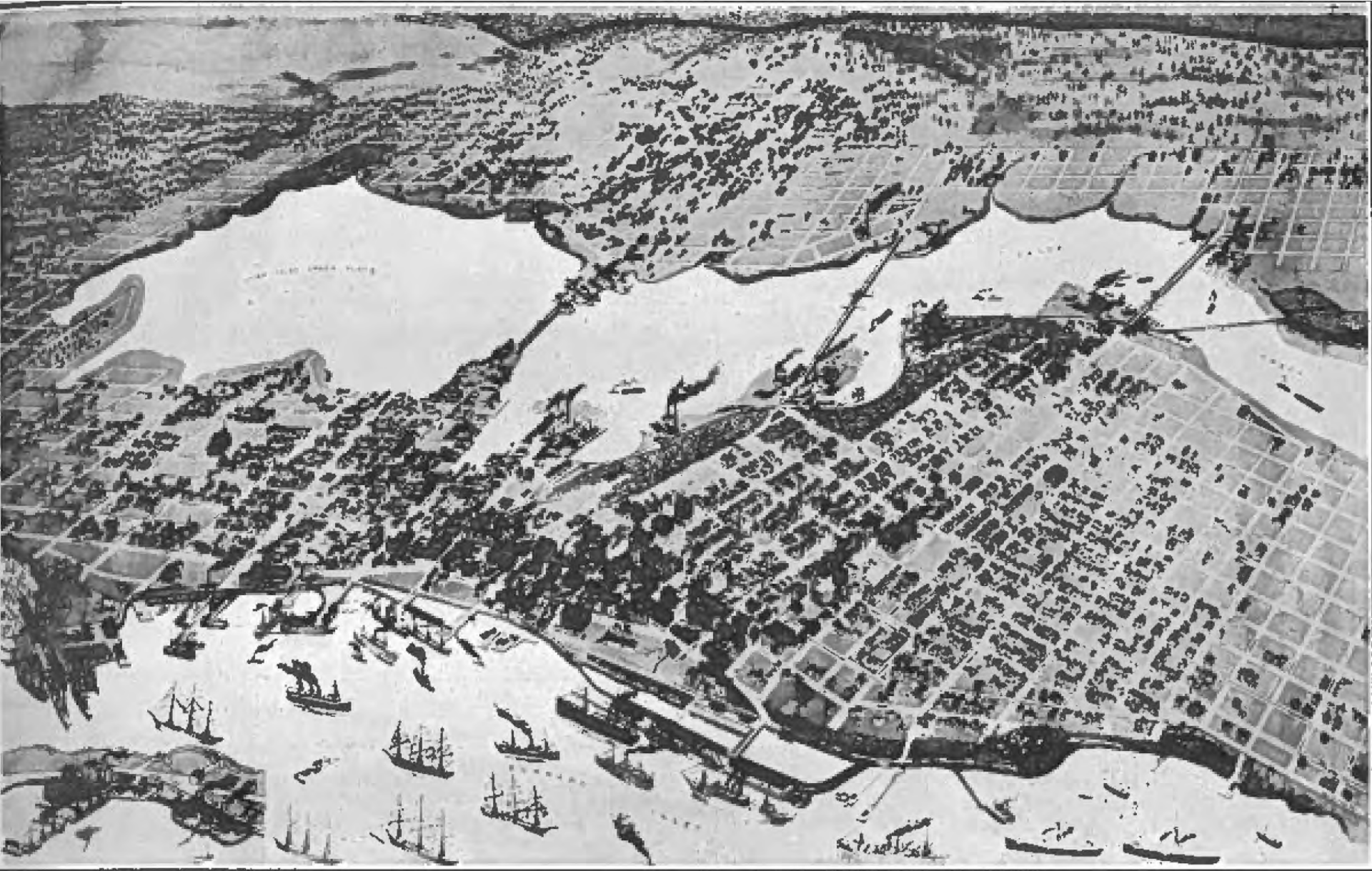
GREEN NETWORKS- VANCOUVER

TODAY

Brief history Vancouver park planning

Current Vancouver green networks planning

VANCOUVER 1898



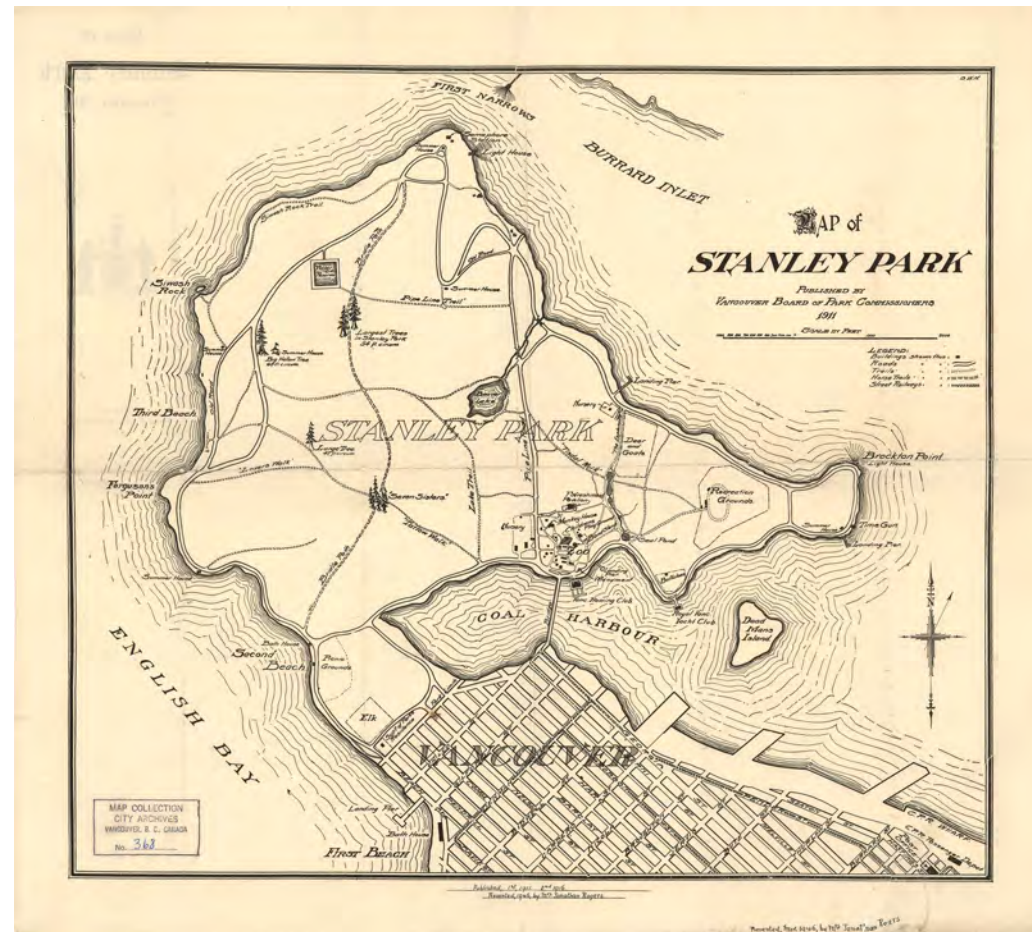
Vancouver in 1898. From an Old Lithograph.

CANADA- LARGE PARKS

1870 - 1900

Major parks acquired in most major cities

Stanley Park, Vancouver
established 1887
(incremental development)



Stanley Park, 1916, source: City of Vancouver Archives

HASTINGS PARK

Acquired by the City in 1889



Renfrew Creek in Hastings Park - Early 1900s



Plan 1915

HASTINGS PARK 1960



Plan 1915



Looking northeast 1960

Sources: City of Vancouver Archives,
Hastings Park Masterplan

*HASTINGS PARK 2018
returning to early visions....*



*The sanctuary in Hastings Park
(PFS Studio)*

Sources: Hastings Park Masterplan 2011, Friends of Hastings Park



BACK TO 1928

A PLAN FOR THE CITY OF VANCOUVER 1928

*Harland Bartholomew Associates , Planners and Engineers
prepared for the Vancouver Town Planning Commission*

“It will be noted that no mention has been made of any human foresight having been exercised in the control or direction of the growth of this British Columbia metropolis. Its history is that of Topsy, it just grewed.

...

It is only within the last four or five years that people began to strive to form an idea of Vancouver as a unit to study the layout of the city with the intention of forming an opinion of whether the structure is fitted to adequately carry out the function of a metropolitan centre.”

VANCOUVER- 1928 Harland Bartholomew Plan

TOPICS IN PLAN

- *street network*
- *public transportation*
- *rail (goods) network*
- *public recreation*
- *zoning*
- *civic art*

PUBLIC RECREATION

- *playgrounds*
- *public schools*
- *parks*
- *beach and shore*
- *pleasure drives*
- *swimming pools*
- *mountain parks*

GREATER VANCOUVER- 5 municipalities

Vancouver

Point Grey

South Vancouver

Burnaby

New Westminster

GREATER VANCOUVER BRITISH COLUMBIA

VANCOUVER
TOWN PLANNING COMMISSION

SCALE IN FEET



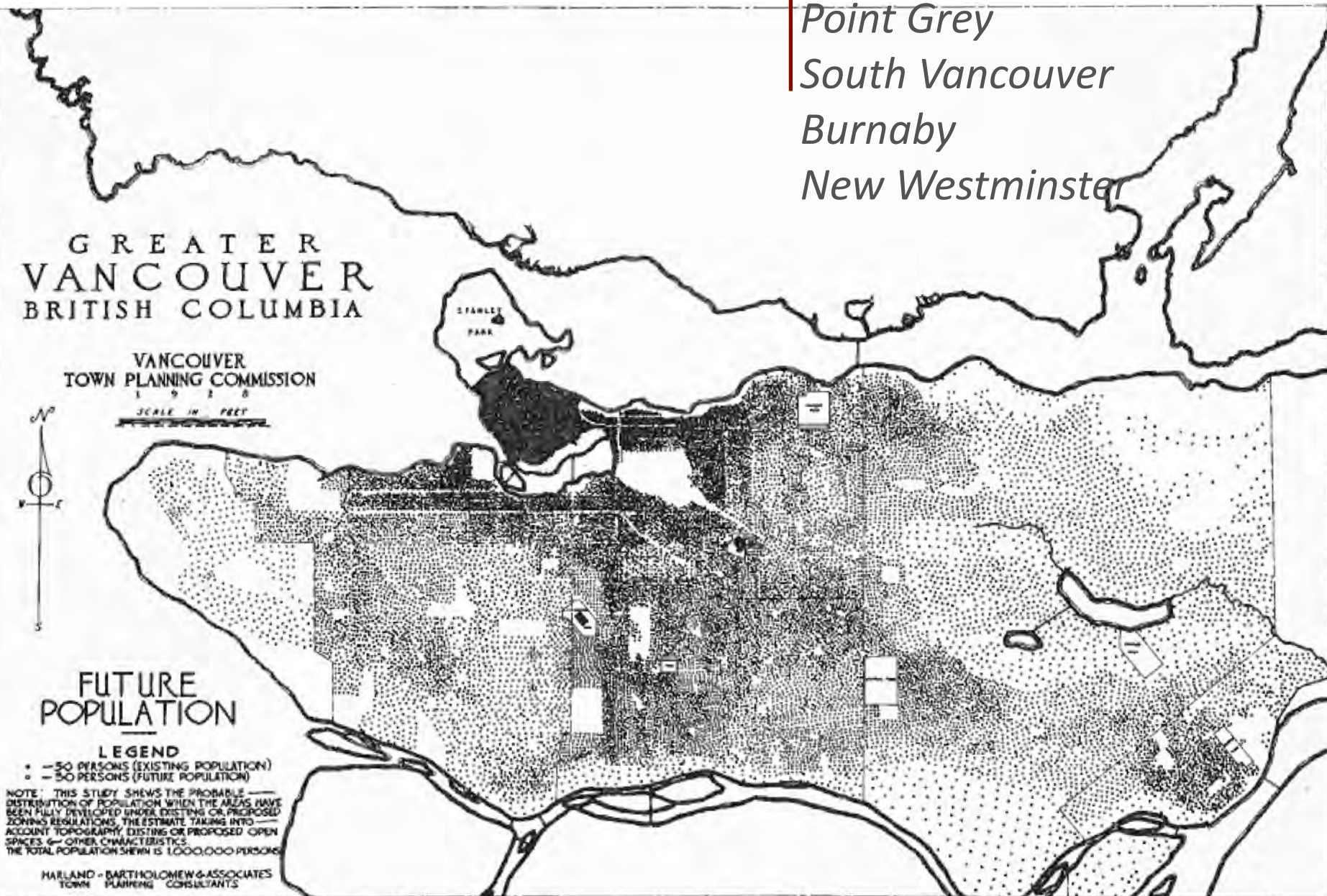
FUTURE POPULATION

LEGEND

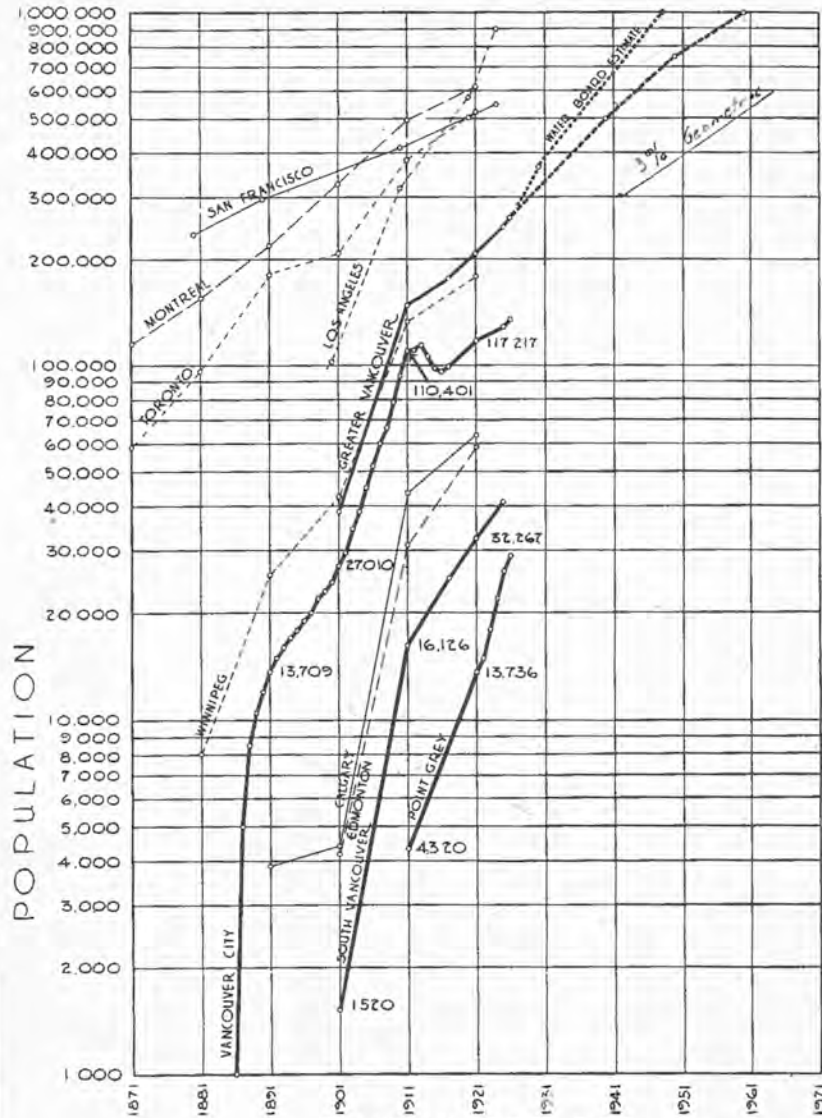
- - 50 PERSONS (EXISTING POPULATION)
- - 50 PERSONS (FUTURE POPULATION)

NOTE: THIS STUDY SHOWS THE PROBABLE DISTRIBUTION OF POPULATION WHEN THE AREAS HAVE BEEN FULLY DEVELOPED UNDER EXISTING OR PROPOSED ZONING REGULATIONS. THE ESTIMATE TAKING INTO ACCOUNT TOPOGRAPHY, EXISTING OR PROPOSED OPEN SPACES, & OTHER CHARACTERISTICS. THE TOTAL POPULATION SHOWN IS 1,000,000 PERSONS.

HARLAND - BARTHOLOMEW & ASSOCIATES
TOWN PLANNING CONSULTANTS



VANCOUVER 1928



1961 1,000,000
 Vancouver +
 Burnaby

2016 833,218
 Vancouver +
 Burnaby

1927 ~ 189,484
 18,850 % increase
 Vancouver +
 South Vancouver +
 Point Grey

2016 610,000
 220 % increase
 Vancouver

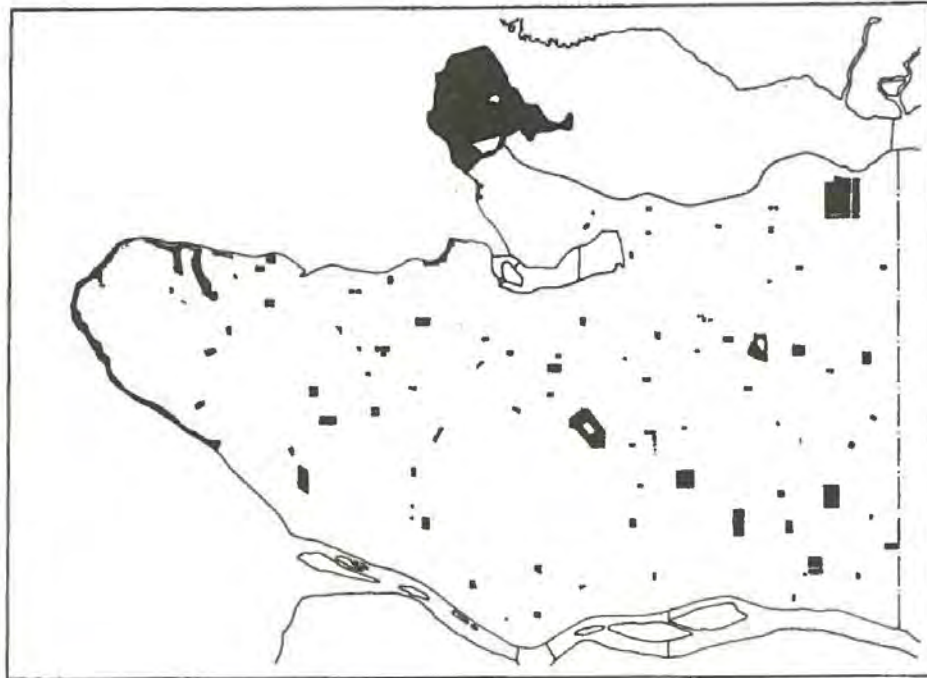
1885 ~ 1000

VANCOUVER
 TOWN PLANNING COMMISSION
 1927

POPULATION GROWTH
 GREATER VANCOUVER

HARLAND BARTHOLOMEW
 & ASSOCIATES
 TOWN PLANNING CONSULTANTS

PUBLIC RECREATION



PUBLIC AREAS AVAILABLE FOR RECREATION

“Parks and playgrounds and other facilities for public recreation are today considered indispensable in the makeup of a great city.”

1928 Harland Bartholomew Plan

CLASSIFICATION of POPULATION

FACILITIES WHICH SHOULD BE AVAILABLE



SMALL CHILDREN

HOME GROUNDS
 INTERIOR BLOCK PLAYGROUNDS
 NEARBY CHILDREN'S PLAYGROUNDS
 & KINDERGARTENS
 DRIVES
 PROMENADES } IN PARKS



SCHOOL CHILDREN

HOME GROUNDS
 INTERIOR BLOCK PLAYGROUNDS
 PLAY AREAS IN PARKS
 SWIMMING POOLS
 BATHING BEACHES

BOY & GIRL SCOUT CAMPS
 SCHOOL PLAYGROUNDS
 PLAYFIELDS FOR ATHLETICS
 COMMUNITY CENTERS
 OUTLYING NATURALISTIC PARKS



YOUTH

PLAYFIELDS
 SWIMMING POOLS
 BATHING BEACHES

NEIGHBORHOOD PARKS
 LARGE PARKS
 COMMUNITY CENTERS
 PLEASURE DRIVES



ADULTS

HARLAND BARTHOLOMEW
 CITY PLAN ENGINEER

CHART SHOWING A
 CLASSIFICATION of POPULATION
 & RECREATION FACILITIES

*PUBLIC RECREATION PERSPECTIVE:
 What facilities and spaces do
 people need?*

INTERIOR BLOCK PLAY AREAS OFFER PROTECTION TO CHILDREN WHO WOULD OTHERWISE BE UPON THE STREET.

BLOCKS WITH DEEPER LOT DEPTHS SHOULD PROVIDE INTERIOR BLOCK PLAYGROUNDS.

PROTECTED PLAY AREAS ARE POSSIBLE IN BLOCKS WITH LOT DEPTHS OF 30 FEET.

PROTECTED PLAY AREAS

COMMUNITY CENTERS ARE NEIGHBORHOOD MEETING PLACES - SCHOOLS - SHELTERS - HALLS IN PARKS & OTHER BUILDINGS WHICH MAY BE USED FOR VARIOUS SITUATIONS MAY SERVE.

DISTRICTS OF 1-1/4 MILE RADII SHOULD BE SERVED.

COMMUNITY CENTERS

PLAYGROUNDS FOR SCHOOLS CHILDREN WITH SUPERVISION SHOULD CONSTITUTE THE PLAYGROUND SYSTEM.

SCHOOL PLAYGROUNDS SHOULD BE OPEN AT ALL TIMES & SACHS PLAYGROUNDS SHOULD BE CLOSED TO PEER LEAD ENROLLMENT.

PLAYGROUNDS WITH SUPERVISION HAVE AN EDUCATIONAL AS WELL AS RECREATIONAL SIGNIFICANCE. DISTRICTS OF 1/4 MILE RADII SHOULD BE SERVED.

SUPERVISED SCHOOL PLAYGROUNDS

CERTAIN SECTIONS OF THE PLEASURE DRIVE SYSTEM SHOULD BE OF THE FORMAL SCHOOLYARD TYPE.

THE PLEASURE DRIVE SYSTEM SHOULD HAVE ITS ORIGIN IN THE HEART OF THE CITY.

OTHER SECTIONS OF THE PLEASURE DRIVE SYSTEM SHOULD BE OF THE INFORMAL NEIGHBORHOOD TYPE.

PLEASURE DRIVES

PLAYFIELDS GENERALLY SHOULD SERVE DISTRICTS OF FROM 1/4 MILE RADII & SHOULD BE OPEN BY SCHOOL HOURS.

ONE SET OF PLAYFIELDS SHOULD BE LOCATED AT ALL JUNIOR & SENIOR HIGH SCHOOLS. ANOTHER SET SHOULD BE IN PARKS OR SPECIAL SITES.

SWIMMING POOLS, TENNIS COURTS, FOOTBALL & BASKETBALL ARE TO BE DEVELOPED IN CONNECTION WITH PLAYFIELDS.

PLAYFIELDS

ONE LARGE PARK SHOULD BE A RECREATION PARK, BEING AS ITS NEAREST FEATURES TENNIS COURTS, FOOTBALL, BASKETBALL, FIELD & POOL GROUPS.

THERE SHOULD BE A PARK HANGING WATER SYSTEM OF WATER SPOCKETS.

OTHER TYPES OF PARKS IN THE LARGE PARK SYSTEM SHOULD INCLUDE AMUSEMENT TYPES, NATURE, NATURALISTIC, STEEL-SCENIC, GARDEN TYPES.

LARGE PARKS

EVERY SQUARE MILE OF RESIDENTIAL AREA SHOULD HAVE ITS NEIGHBORHOOD PARK.

A NEIGHBORHOOD PARK TO BE ABLE TO RENDER FIRST AID SERVICE SHOULD HAVE AT LEAST 30 ACRES (FRUITLAND) TO 1/2 ACRES.

A PARK OF THIS TYPE SHOULD HAVE A PORTION OF ITS AREA USED AS A TENNIS FIELD.

NEIGHBORHOOD PARKS

SWIMMING POOLS
BATHING BEACHES
OUTDOOR THEATRES
TENNIS COURTS

SPECIAL FACILITIES

BARTHOLOMEW & ASSOCIATES
CITY PLANNING & SCULPTURE ENGINEERS

TYPES OF RECREATION FACILITIES

VANCOUVER TOWN PLANNING COMMISSION
1928

STANDARDS:

Playgrounds:

Preschool- small lots on each block
School age- schoolyards 100 sq ft
playground/student (1 yard
8,000-12,000 people)

Playfields:

Affiliated with high schools
Neighbourhood parks:
20 acres minimum
2500 families

1/2 mile walking distance

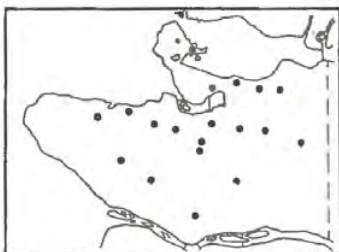
Community centres:

Indoor recreation
One in every neighbourhood

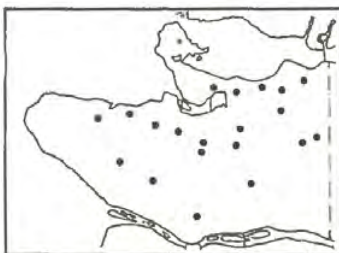
VANCOUVER Existing parks and facilities



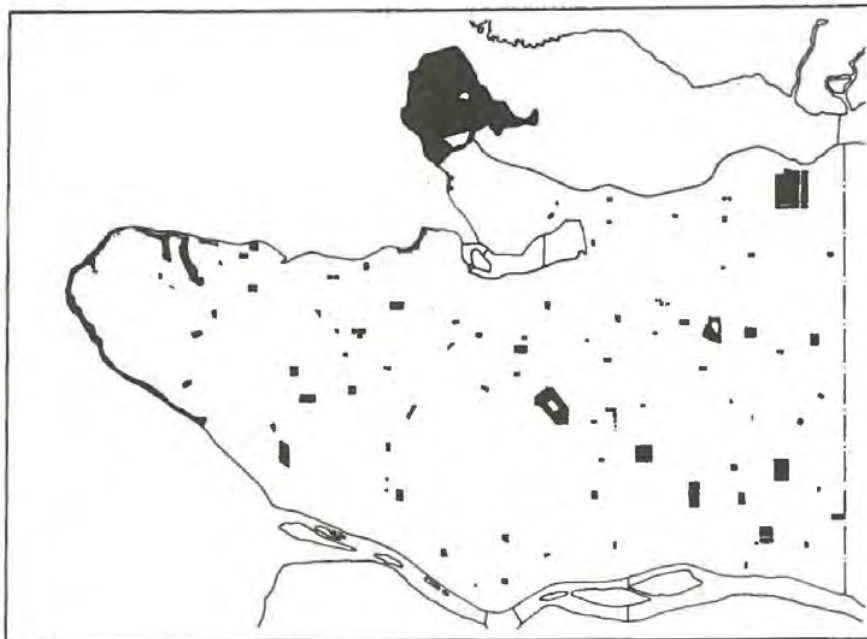
TENNIS COURTS



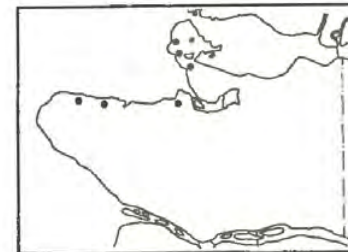
FOOTBALL FIELDS



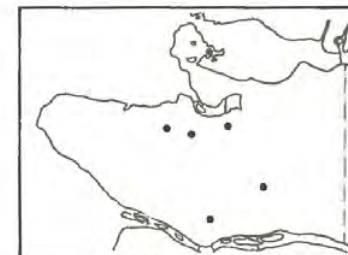
BASEBALL FIELDS



PUBLIC AREAS AVAILABLE FOR RECREATION



BATHING BEACHES



CRICKET GROUNDS

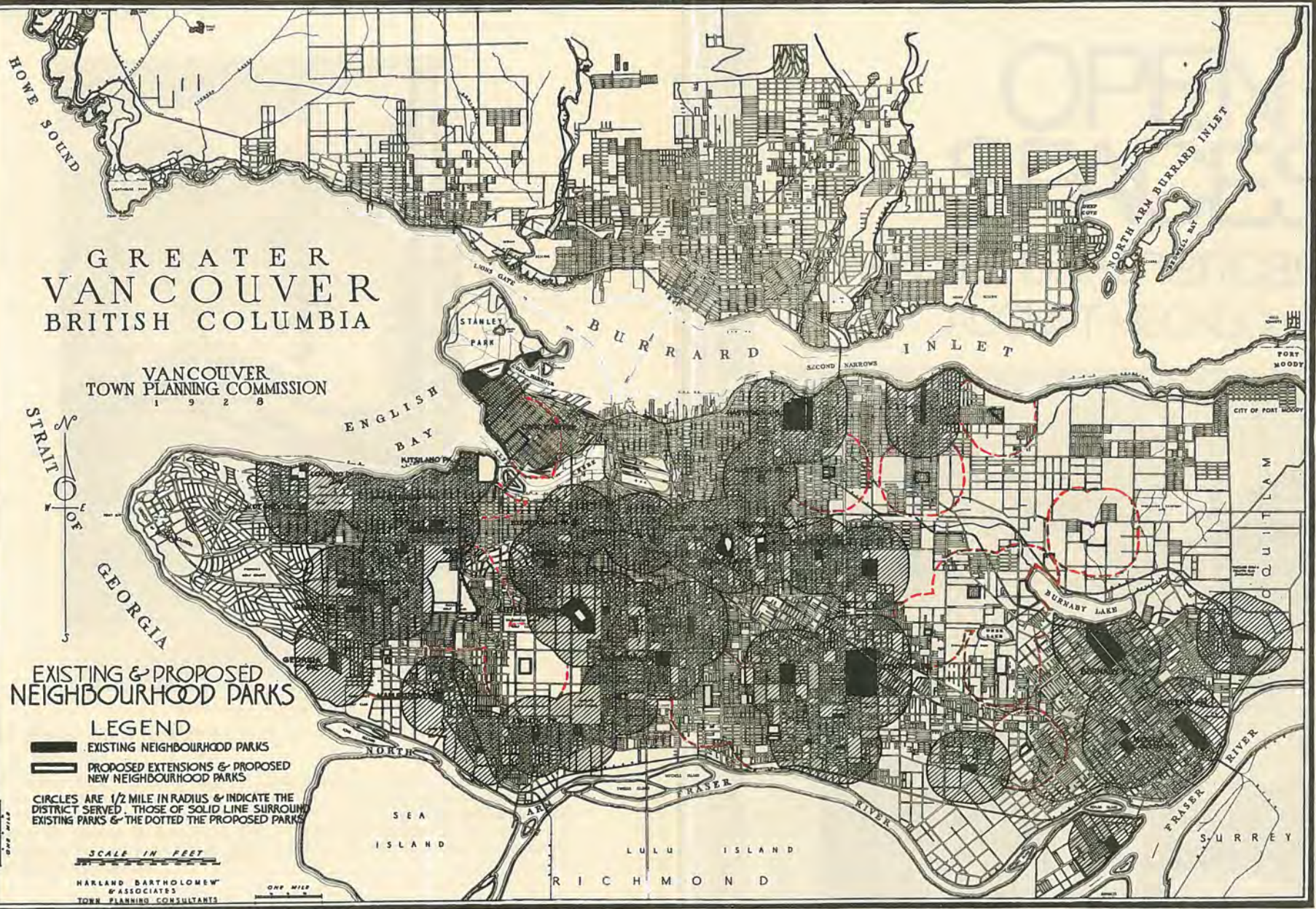


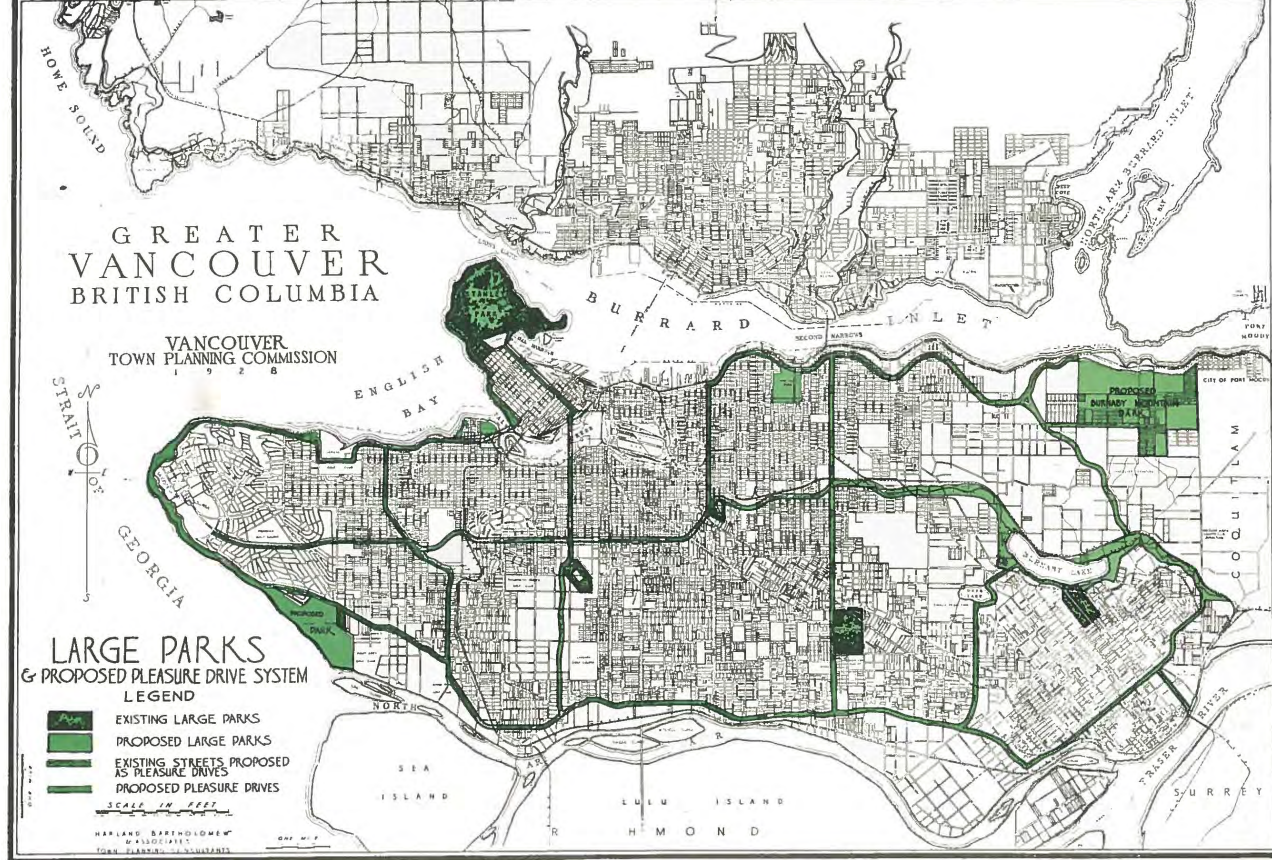
PICNIC GROUNDS

EXISTING RECREATION FACILITIES VANCOUVER B.C. 1928

VANCOUVER
TOWN PLANNING COMMISSION

HARLAND BARTHOLOMEW
& ASSOCIATES
TOWN PLANNING CONSULTANTS





Large Parks:

- *preserve all types of native landscape*
- *each with a distinct feature (golf course, botanical garden...)*

Pleasure drives:

- *boulevards connecting all large parks*
- *some may follow topography*

PLEASURE DRIVE —> Heritage Landscape

1993 designated a heritage landscape by City of Vancouver





GEORGIA

ENGL.
BA



LARGE PARKS & PROPOSED PLEASURE DRIVE SYSTEM LEGEND



EXISTING LARGE PARKS



PROPOSED LARGE PARKS



EXISTING STREETS PROPOSED AS PLEASURE DRIVES



PROPOSED PLEASURE DRIVES

SCALE IN FEET



HARLAND BARTHOLOMEW
& ASSOCIATES
TOWN PLANNING CONSULTANTS

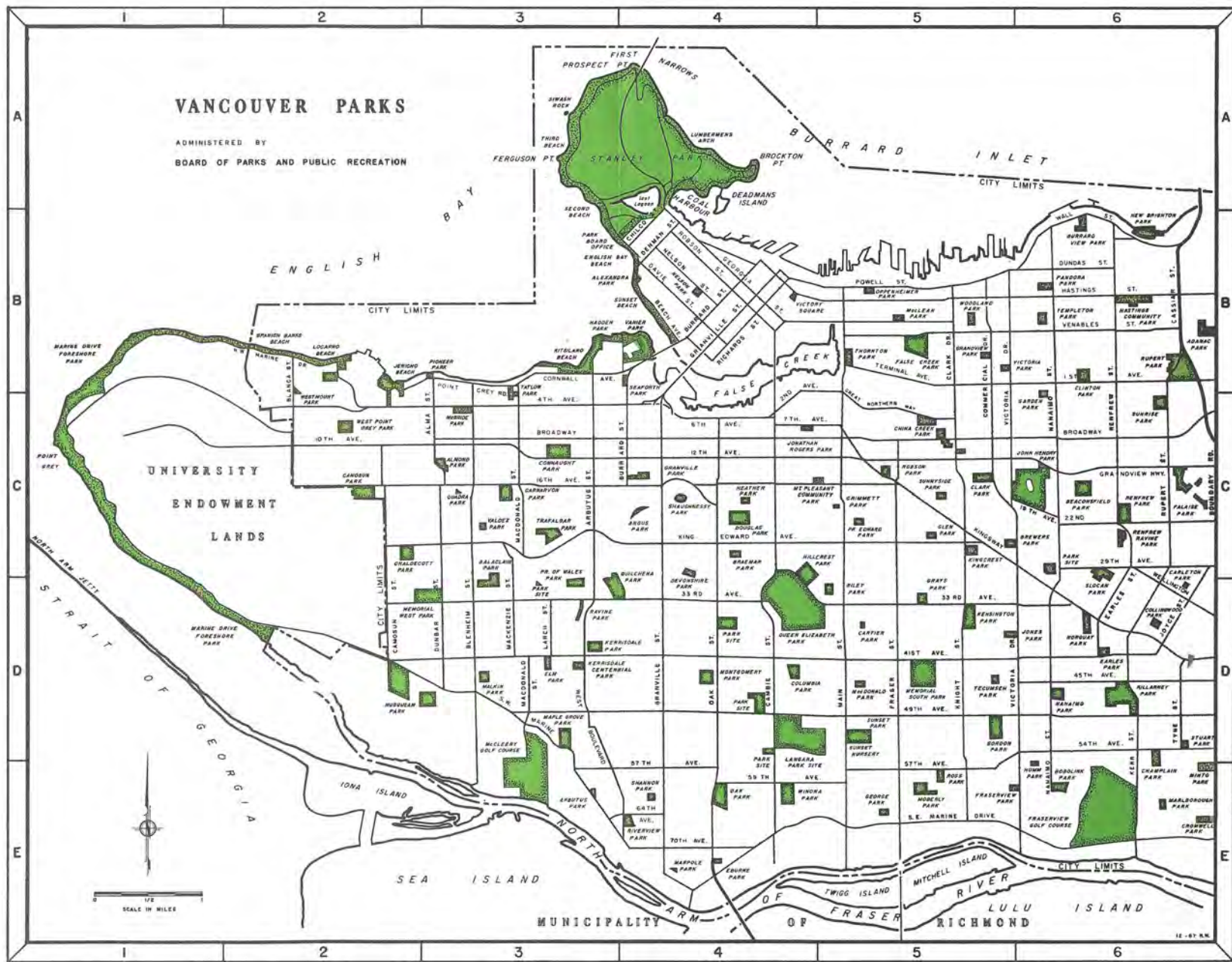
ONE MILE

NORTH

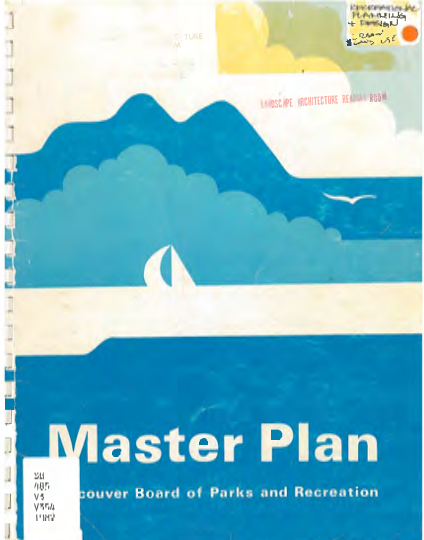
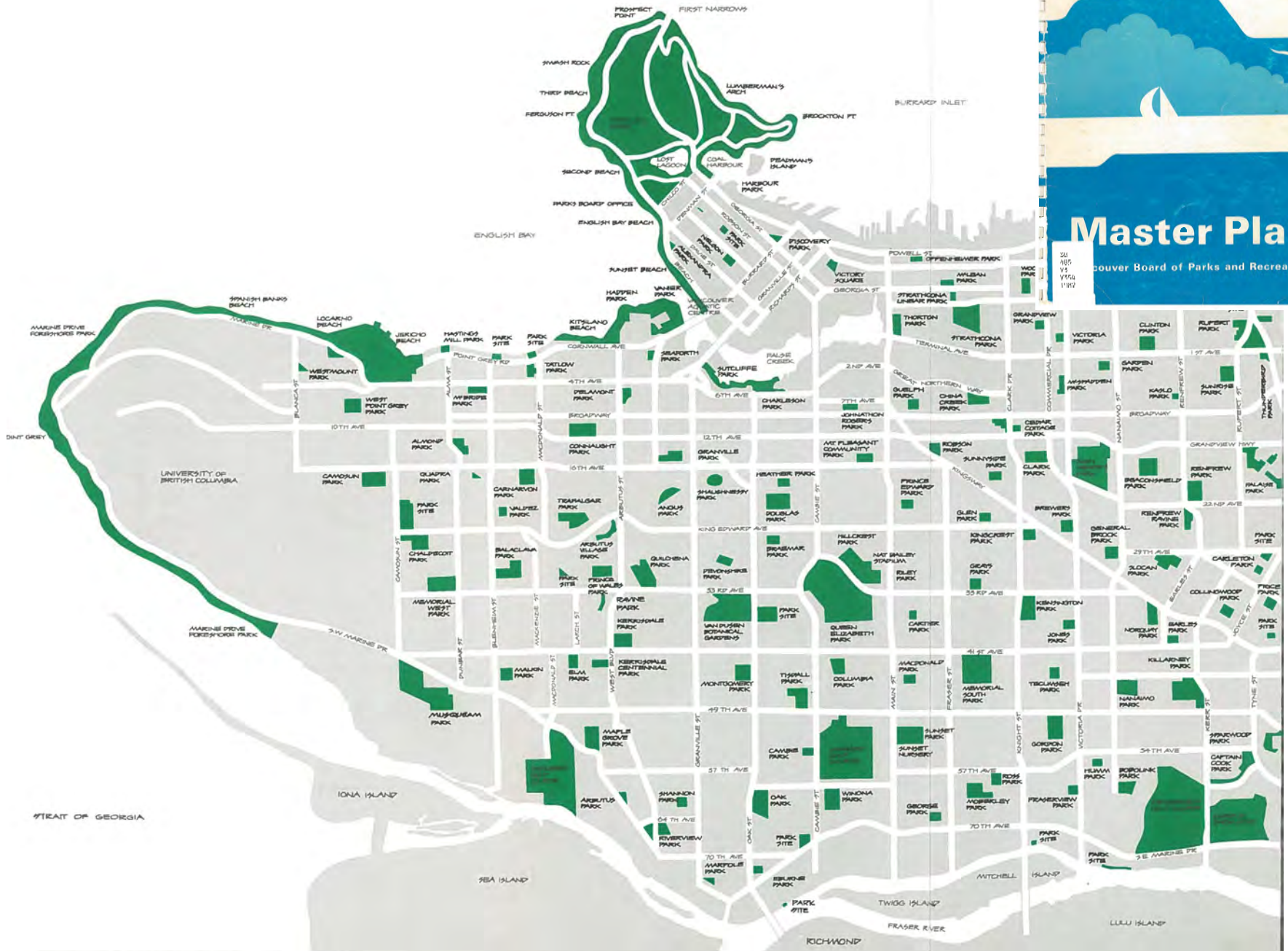
SEA

ISLAND

1946 and 1960 Parks Plans



1982 PARKS MASTERPLAN



Master Plan

Vancouver Board of Parks and Recreation

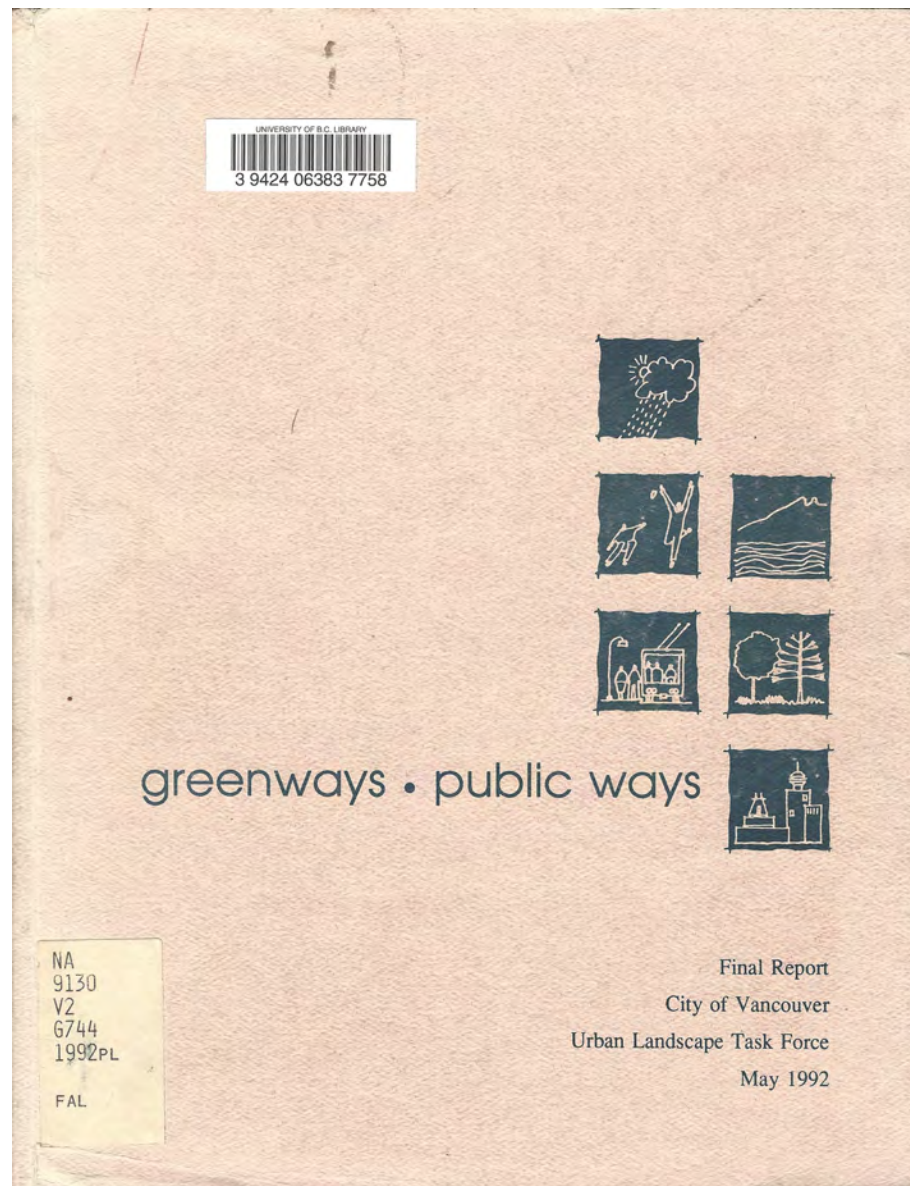
1992 URBAN LANDSCAPE TASK FORCE

CHAIR: Moura Quayle, Landscape Architect

URBAN GREENWAYS

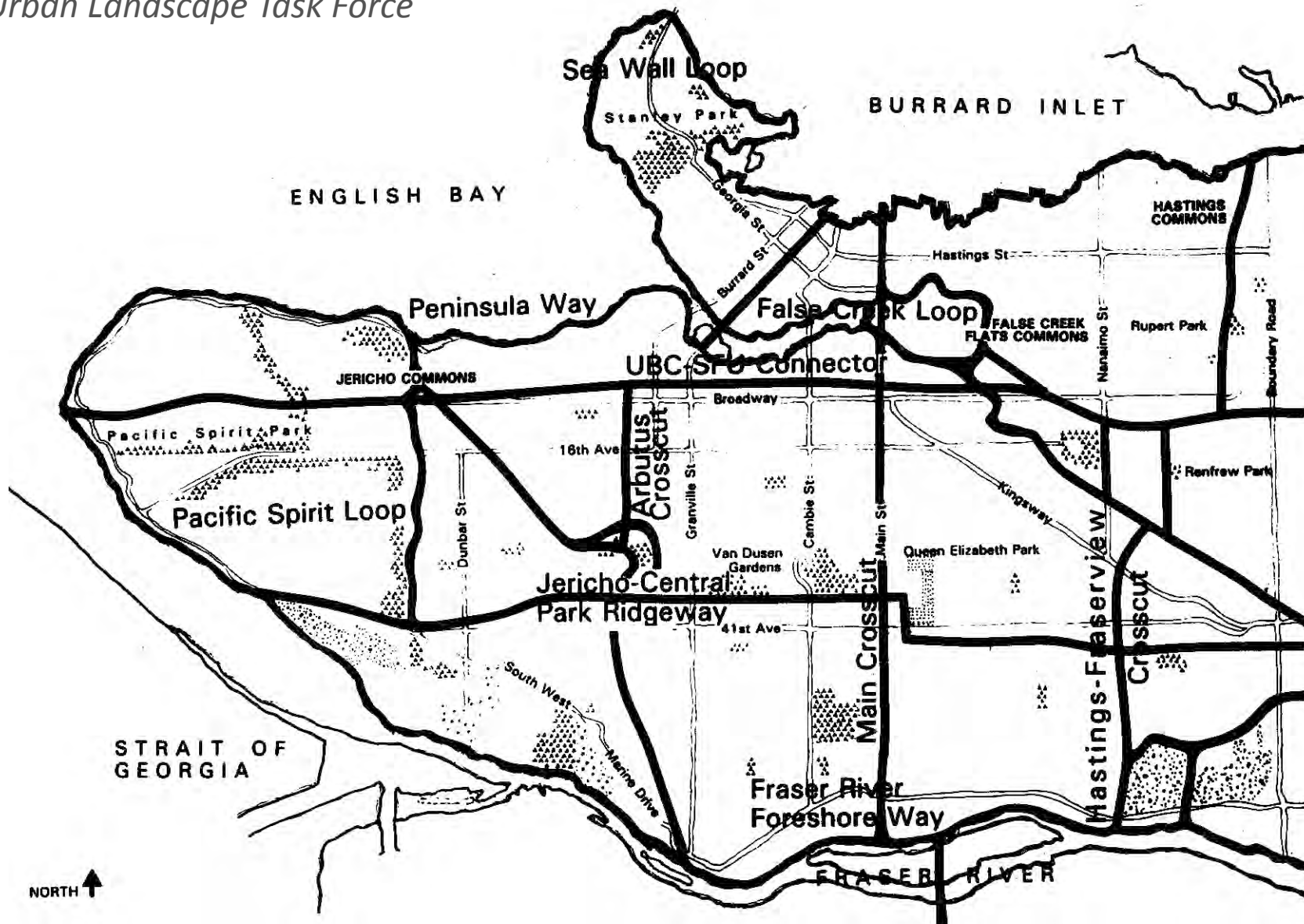
A greenway is *a linear public corridor* that connects parks, nature reserves, cultural features, historic sites neighbourhoods and retail areas often along either natural corridors like rivers or ocean fronts or along rail rights-of-way or streets shared for transportation use.

Quayle, Greenways Public Ways 1992,
Vancouver BC



ESTABLISH URBAN GREENWAYS

Urban Landscape Task Force



1992 URBAN LANDSCAPE TASK FORCE

RECOMMENDATIONS (select)

- Establish urban greenways
 - Celebrate legacies
- Prepare a public realm plan
 - Develop a street strategy
- Undertake a landscape inventory
- Prepare an ecological management plan
 - Ecological performance standards
 - Promote the urban forest
 - Cultivate the city of gardens
 - Urban villages

PUBLIC REALM PLAN

- Use an accessible public process
- Urban landscape inventory—
biophysical and cultural
- A greenway plan ✓
- An ecological management plan ✓
- A public realm programming strategy (expand beyond recreation to include urban agriculture and celebration spaces)
- Include streets as multi-use spaces

1992 URBAN LANDSCAPE TASK FORCE

RECOMMENDATIONS (select)

- *Establish urban greenways*
 - *Celebrate legacies*
- *Prepare a public realm plan*
- *Reclaim local streets for bicycles*
- *Undertake a landscape inventory*
- *Prepare an ecological management plan*
- *Ecological performance standards*
 - *Promote the urban forest*
- *Cultivate the city of gardens*
 - *Urban villages*

ESTABLISH URBAN GREENWAYS

- *Expand the existing waterfront greenway system ✓*
- *Establish the Grandview Cut as a ecological reserve*
- *Establish the Arbutus Greenway ✓*
- *Establish the Hastings-Fraserview crosscut (eastside north-south greenway)*
- *Designate specific green street linkages ✓*

City of Vancouver 1995 GREENWAYS PLAN

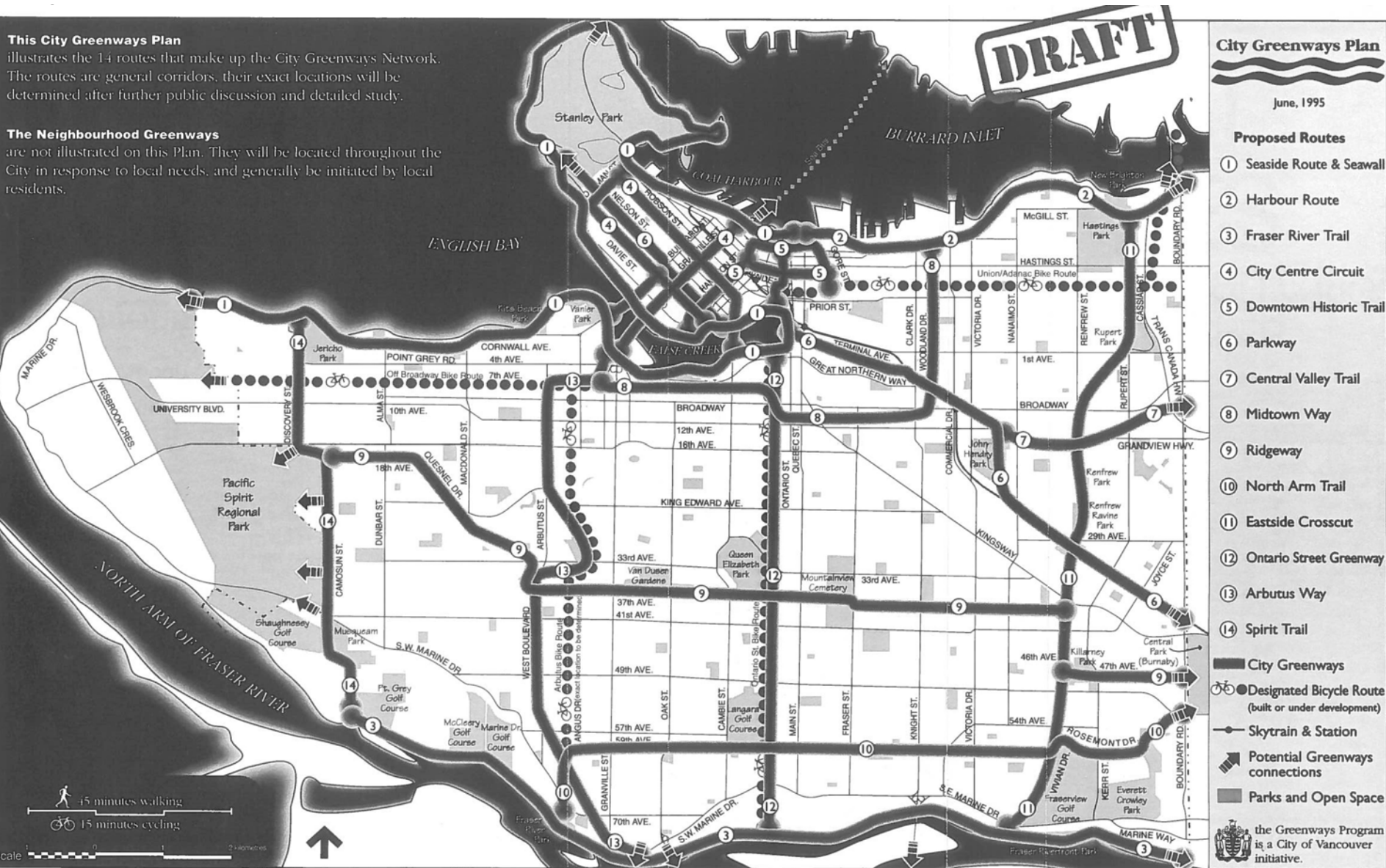
A system of paths for walking and cycling across the

This City Greenways Plan

illustrates the 14 routes that make up the City Greenways Network. The routes are general corridors, their exact locations will be determined after further public discussion and detailed study.

The Neighbourhood Greenways

are not illustrated on this Plan. They will be located throughout the City in response to local needs, and generally be initiated by local residents.




City Greenways Plan



June, 1995

Proposed Routes

- ① Seaside Route & Seawall
- ② Harbour Route
- ③ Fraser River Trail
- ④ City Centre Circuit
- ⑤ Downtown Historic Trail
- ⑥ Parkway
- ⑦ Central Valley Trail
- ⑧ Midtown Way
- ⑨ Ridgeway
- ⑩ North Arm Trail
- ⑪ Eastside Crosscut
- ⑫ Ontario Street Greenway
- ⑬ Arbutus Way
- ⑭ Spirit Trail

- City Greenways
- Designated Bicycle Route (built or under development)
- Skytrain & Station
- ▬ Potential Greenways connections
- Parks and Open Space

 the Greenways Program is a City of Vancouver initiative.

 45 minutes walking
 15 minutes cycling
 Scale 0 1 2 kilometers

City of Vancouver 2011 GREENWAYS

City Greenways Plan

This plan illustrates the routes of the proposed City Greenways Network.



Legend

- 1 Seaside
 - 2 Lagoon
 - 3 Central Valley
 - 4 Granville
 - 5 Downtown Historic Trail
 - 6 Carrall
 - 7 Portside
 - 8 Midtown Way
 - 9 Parkway
 - 10 Spirit Trail
 - 11 Ridgeway
 - 12 Arbutus
 - 13 Ontario
 - 14 Eastside Crosscut
 - 15 North Arm Trail
 - 16 Fraser River Trail
 - 17 City Centre
- Greenway
Constructed or in progress
 - Proposed Greenway
Exact route to be determined through public consultation and detailed study
 - Bikeway
Constructed or in progress
 - - - Trans Canada Trail
 - ⇄ Potential connections
 - Parks and open spaces

0km 1km 2km 3km
3km = 15 min. 45 min.

April 2011

2011 map



© 2011 City of Vancouver. Greenways South (South) Proposed Greenways Map, 2011. Greenways Plan Update.

VANCOUVER'S GREENEST CITY ACTION PLAN



*Vancouver 2020:
A Bright Green Future
AKA Greenest City action plan*

VANCOUVER 2020 A BRIGHT GREEN FUTURE
AN ACTION PLAN FOR BECOMING THE WORLD'S GREENEST CITY BY 2020

***Make Vancouver the greenest city
in the world by 2020***



VANCOUVER'S GREENEST CITY ACTION PLAN

ONE GREEN ECONOMY & JOBS

*World-wide mecca of
green jobs*

*Eliminate dependence on
fossil fuels*

*World leadership in green
building design &
construction*

TWO GREENER COMMUNITIES

***Green mobility: walking,
cycling and public transit***

Zero waste

Easy access to nature

*Achieve a one-planet eco-
footprint*

THREE HUMAN HEALTH

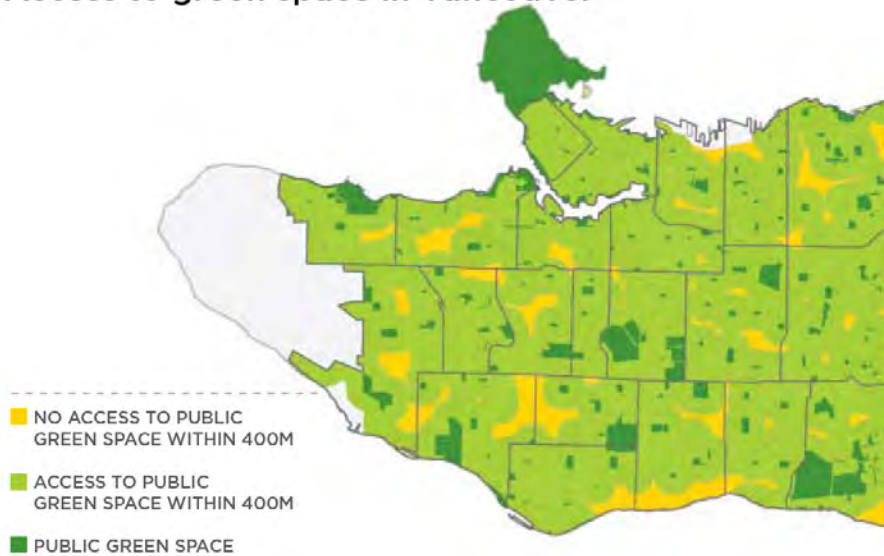
***Clean water: beat WHO
standards and reduce
consumption***

***Clean air: beat WHO
guidelines***

***Local food: global leader
in urban food systems***

GREENEST CITY ACTION PLAN- Access to Nature

Access to green space in Vancouver



TARGETS

All Vancouver residents will be within a 5 minute walk of a park, greenway or other green space by 2020

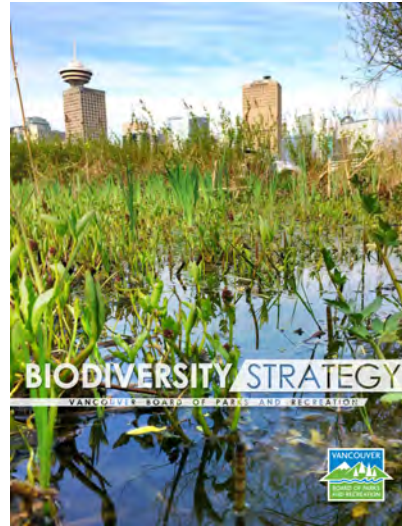
Plant 150,000 trees by 2020

VANCOUVER- GREENSPACE PLANNING TODAY

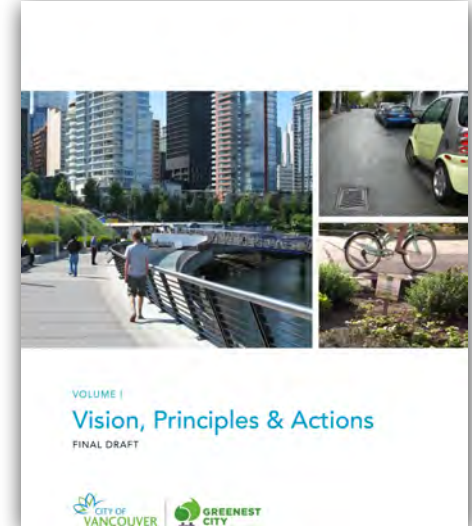
URBAN FOREST



BIODIVERSITY



GREEN INFRASTRUCTURE



PARKS & RECREATION PLANNING



Report 1 June 2018
Inventory and Analysis

VANPLAY: VANCOUVER'S PARKS & RECREATION PLANNING



VanPlay- A 25-year plan

“will provide a road map to maximize access to high-quality parks and recreation experiences that connect people with each other, and with nature.”

PROCESS TIMELINE

PHASES + ENGAGEMENT ACTIVITIES



VANPLAY: VANCOUVER'S PARK & RECREATION PLANNING

10 GOALS:

Grow and Renew Assets

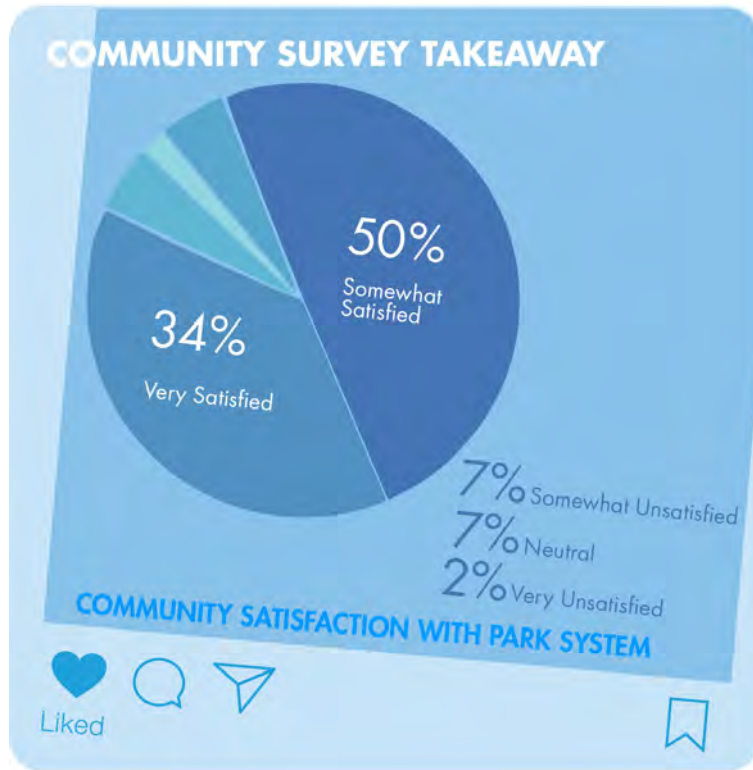
Protect Existing Parks and Spaces

SECTIONS: Prioritize Delivery of Resources

- *Parks* *Focus on Core Responsibilities*
 - *Recreation* ***Adapt to Climate Change***
 - *Facilities* ***Create a Green Network***
 - *Nature* ***Restore Wild Spaces***
- Foster Safety and Welcome*
- Seek Truth and Reconciliation*
- Secure Funding*

“The parks and recreation system is increasingly under pressure from competing interests for land use and funding.”

VANPLAY: PARKS



CHALLENGES:

Increased demand

Deferred maintenance

Varying needs across communities

Deteriorating biodiversity

Climate change

Sea level rise

High demand for public land

Loss of solar access

84% satisfied

49% prioritize need to improve parks— equity, inclusion, access, affordability, maintenance

VANPLAY: PARKS

PARK PROVISION (EXCLUDING DESTINATION PARKS) (2011)

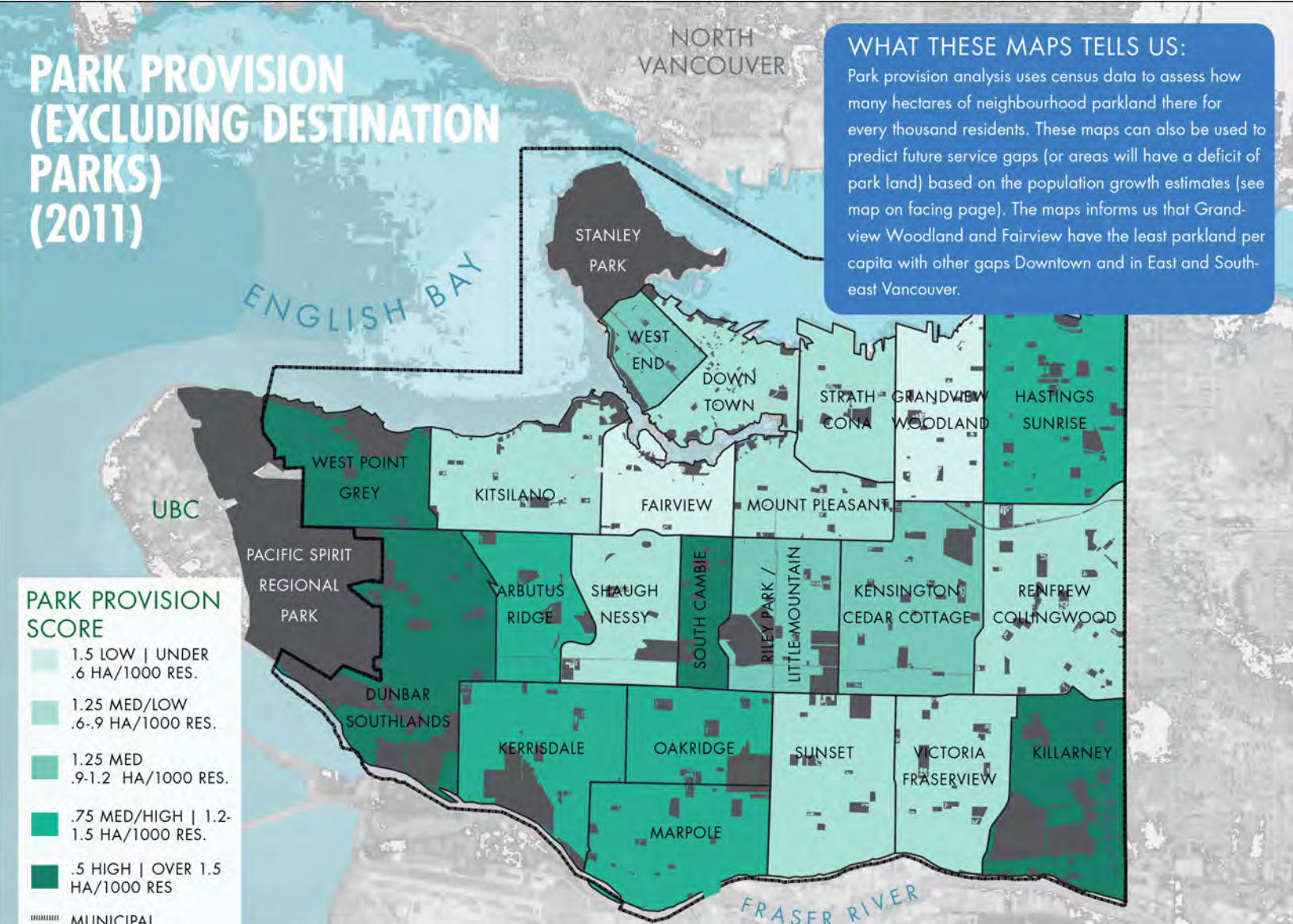
WHAT THESE MAPS TELLS US:

Park provision analysis uses census data to assess how many hectares of neighbourhood parkland there for every thousand residents. These maps can also be used to predict future service gaps (or areas will have a deficit of park land) based on the population growth estimates (see map on facing page). The maps informs us that Grandview Woodland and Fairview have the least parkland per capita with other gaps Downtown and in East and South-east Vancouver.

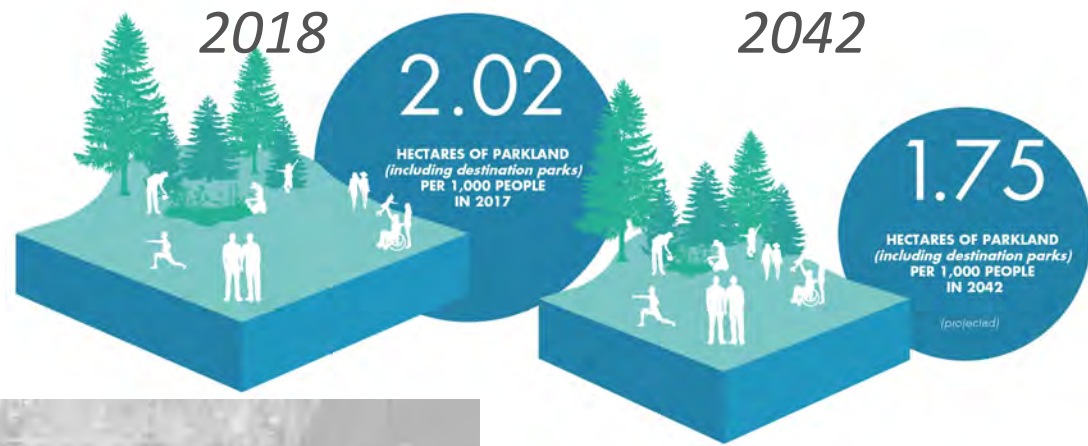
PARK PROVISION SCORE

- 1.5 LOW | UNDER .6 HA/1000 RES.
 - 1.25 MED/LOW .6-.9 HA/1000 RES.
 - 1.25 MED .9-1.2 HA/1000 RES.
 - .75 MED/HIGH | 1.2-1.5 HA/1000 RES.
 - .5 HIGH | OVER 1.5 HA/1000 RES
- ▬▬▬▬▬▬▬ MUNICIPAL BOUNDARY

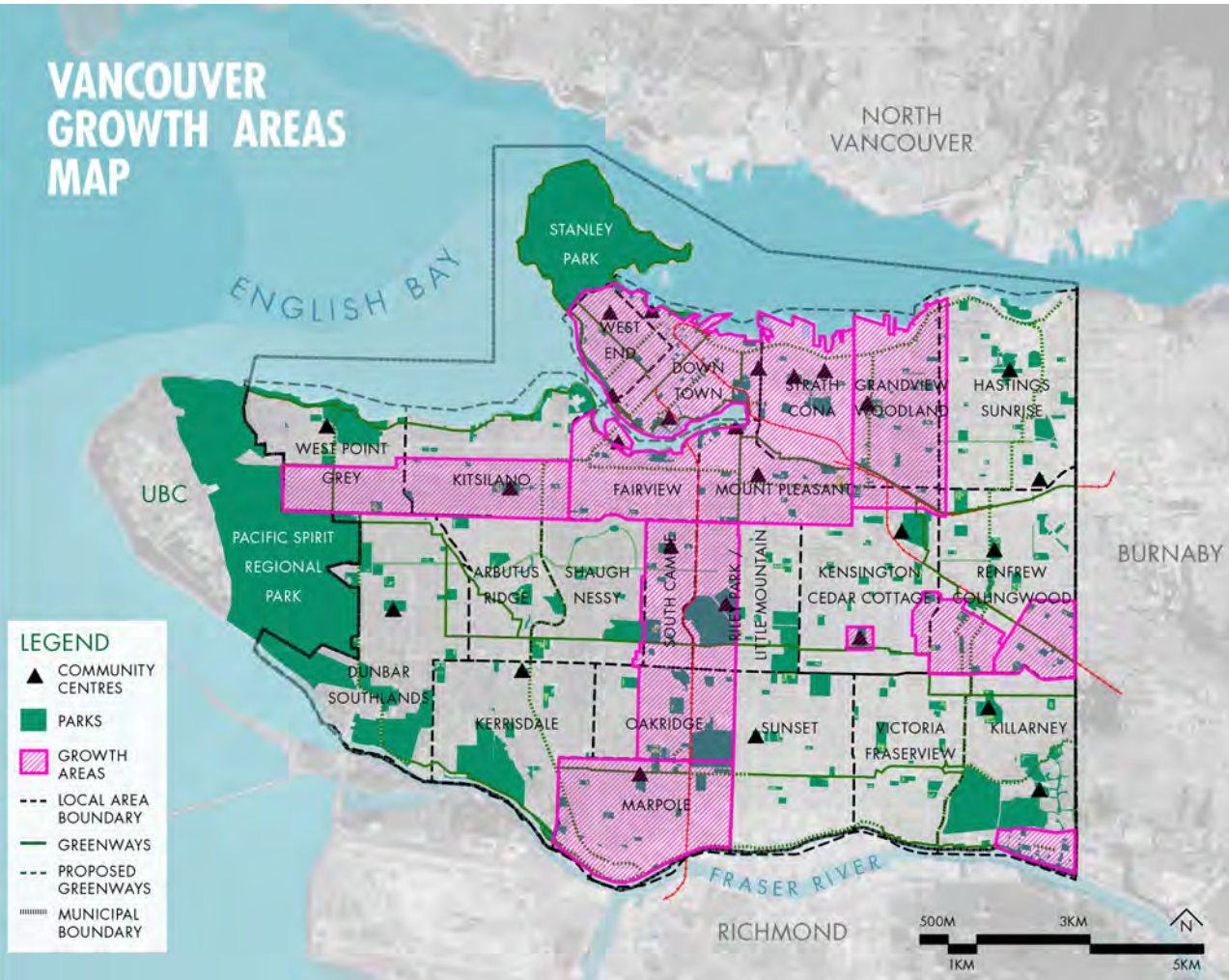
SOURCE: Park Board park data + 2011 census data. (Including all Park Board parks except for destination parks)



VANPLAY: PARKS



VANCOUVER GROWTH AREAS MAP



*INCREASING DEMAND
As population grows
parkland per person
decreases*

VANPLAY: NATURE

EMERGING QUESTIONS

MORE WILD SPACES: Where can we create more wild spaces in the city? How can we balance need for wild, less curated spaces with needs for other outdoor recreation amenities?

ECOLOGICAL HEALTH: In a growing city how can we support ecological health? Can green infrastructure improve water quality and ecological health while managing the city's stormwater?

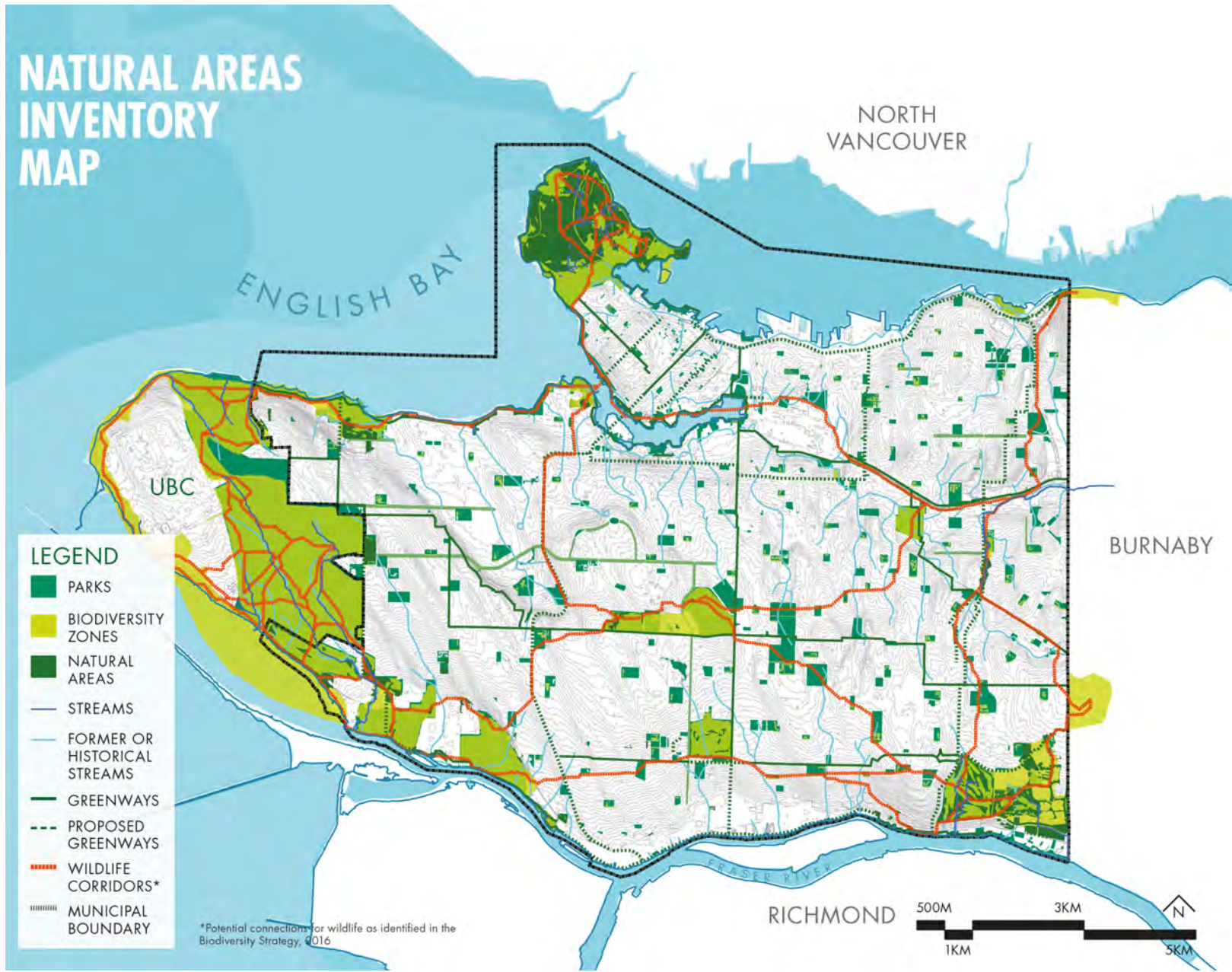
CONNECTION TO NATURE: How can we best support Vancouverites to be stewards of our natural spaces? How do we diversify the types of landscapes in our parks to bring more nature into Vancouver's neighbourhoods?

PRIORITIES FOR ACTION

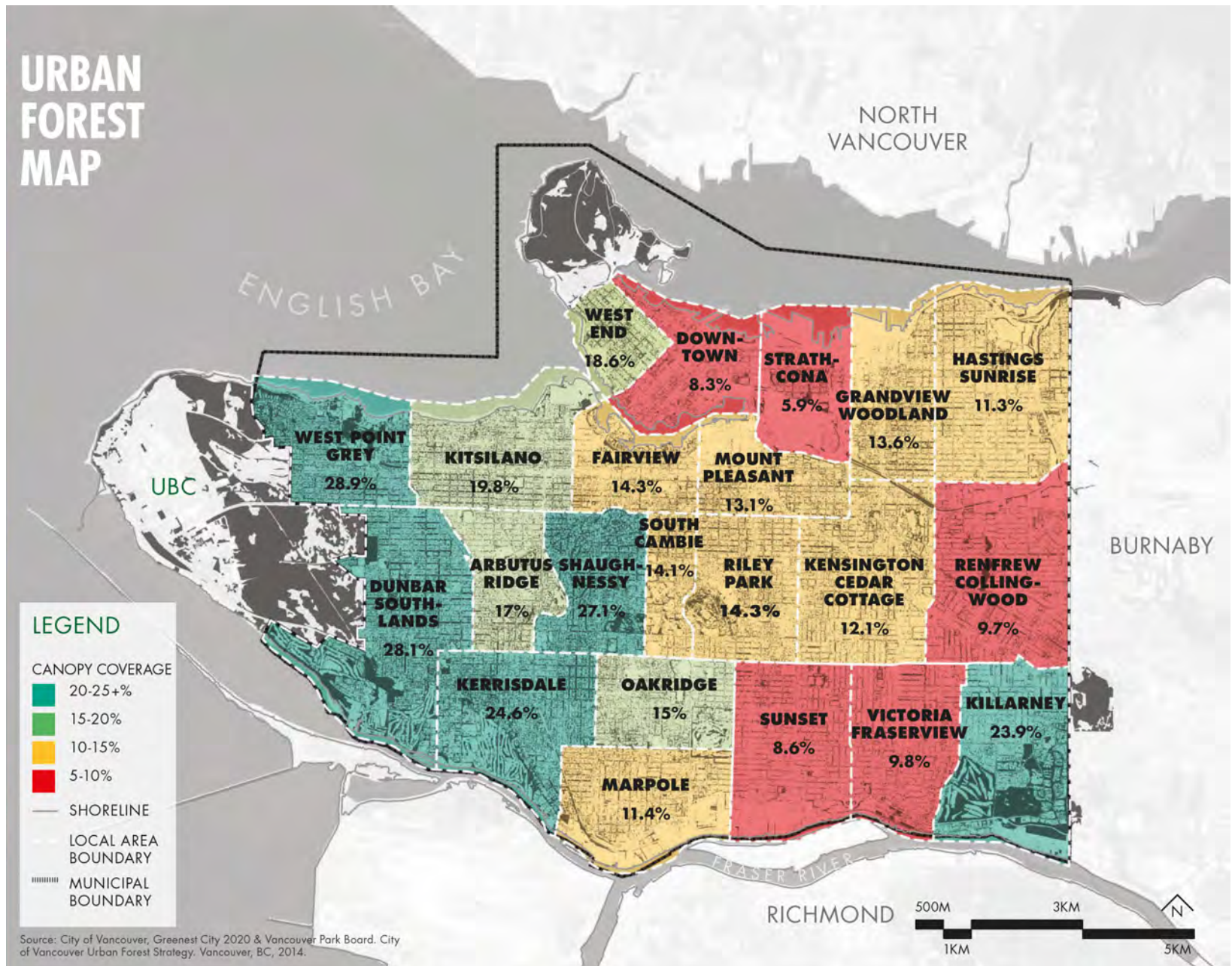
Throughout all the community engagement to date, the most commonly cited opportunities and big ideas were on the topics of:

- *Access to nature*
- *Wild spaces*
- *Biodiversity*
- *Wildlife*

VANPLAY: NATURE



VANPLAY: NATURE



REGIONAL GREENSPACE PLANNING

February 13, Jeffrey Fitzpatrick



Metro Vancouver

Regional Parks Plan

2016



Strategic Directions for Biodiversity Conservation
IN THE METRO VANCOUVER REGION

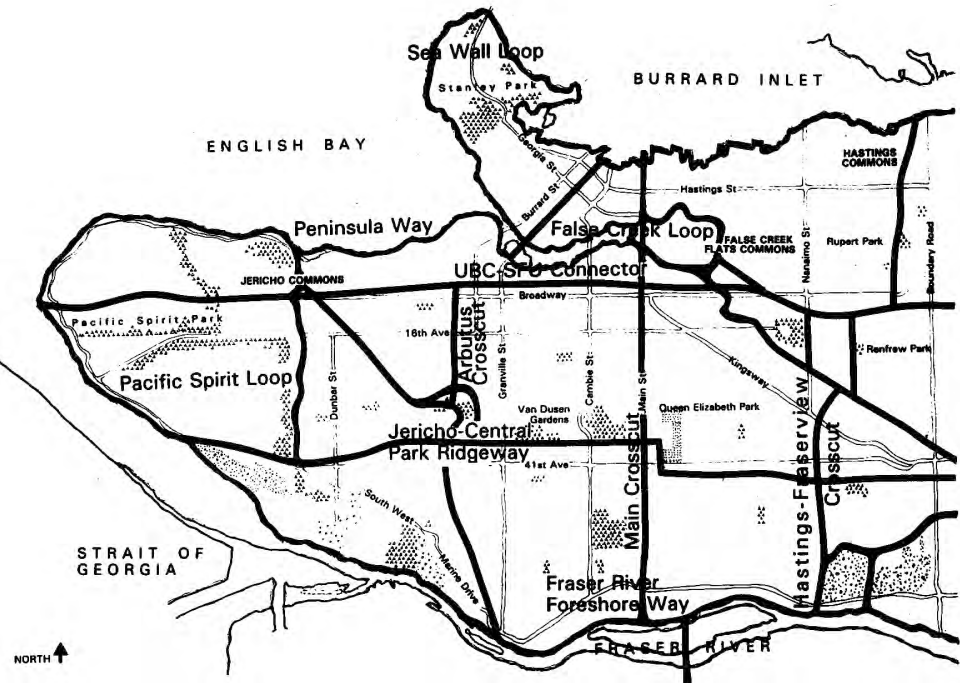



WORKING TOGETHER
FOR THE
GEORGIA BASIN
DECEMBER 2008

City of Vancouver 1995 GREENWAYS PLAN



City of Vancouver 1995 GREENWAYS PLAN



VANCOUVER- 90 YEARS OF PARKS AND GREEN NETWORK PLANNING

Resilient concepts and structure

- *Public parks are resilient*
- *Green networks idea resilient— functions change
(from pleasure drives to green networks for walking and cycling
to ecological connections)*
- *Park and urban forest distribution remains inequitable*
- *Massive “win” - Pacific Spirit Regional Park*
- *10 minute walk to parks became 5 minute walk to
nature*
- *Parks added with time and population*

*Q.—Is there a tipping point in the population v.
greenspace challenge?*

QUESTIONS?
COMMENTS?

....PROJECT 1

WEDNESDAY CLASS *January 16*



GALLERY STYLE REVIEW

PRINT YOUR PROJECTS!

All projects will be put up on the wall.

LOCATION: Landscape Architecture Annex Jury Room.
2371 Main Mall

AGENDA:

9:30 am - all projects will be tacked to a panel.

9:30 to 10:30 am Groups will be assigned two other groups to “review” projects with.

10:30 Some teams will be asked to present their solutions to everyone.