Clarifying Transit

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Proposal

I began this project when I realized how the information design of TransLink services in Vancouver was often insufficient or confusing.

I developed the thesis that clearer, more effective communication of transit information to travellers, achieved through careful and consistent information design, could make travellers more comfortable in navigating the transit network, and more likely to use transit.

I proposed establishing design standards that could be applied consistently across all modes of public transit in Metro Vancouver to present transit information clearly and completely.

Designing for the population of Metro Vancouver must take into account its high level of cultural and linguistic diversity. Approximately 43.3% of the population of Metro Vancouver, including over half of Vancouver, Burnaby, and Richmond residents, identified a language other than English as their mother tongue in the 2008 Census.

In addition, the TransLink system is often used by tourists who have little to no concept of Vancouver's geography and its transit services.

Any information design system, I knew, would have to provide a clear and consistent use of both written and visual language.

Research

I intended to discover where the lack of transit information was most noticeable, and where effective information could make the biggest difference, by studying users of the TransLink system.

I conducted an online survey, distributed through Twitter and by mentions on urban planning blogs, among Metro Vancouver residents.

Respondents were asked some basic information about themselves and their physical location, how they travelled within Metro Vancouver, and their opinion about the TransLink system itself and its information design.

All of my respondents were transit users, and over half were primarily transit users.

Their opinion of the TransLink system was generally positive: a majority agreed that TransLink services were usually on time, frequent, comfortable, and convenient.

TransLink's navigational information was less highly regarded: while many respondents were satisfied with the information available online and at SkyTrain stations, they were less satisfied with the information available by phone and especially at bus stops.

I conducted primary research on the @translink Twitter feed over a period of five weeks. TransLink's own data reveals that Twitter users (over 7,800 followers at the end of the research period) have responded positively to this point of contact: during the pilot stage of the Twitter project, TransLink received 118 user commendations through their formal feedback system.

My own research led me to the same conclusions. During my research period, @translink received 2,045 replies, and the word "thanks" was second only to "bus" among these replies.

Over half of the replies to @translink were sent from mobile devices.

To learn about TransLink's design strategy in the context of real world, day-to-day operation of the transit system itself, I met with Benson Chin, a Corporate Marketing Specialist at TransLink. He explained TransLink's best practices approach: studying other transit operators, identifying ideas that work for other transit systems and adapting them for TransLink's needs.

Chin identified bureaucracy and lack of funding as obstacles to a coherent design strategy. (I chose to assume these obstacles did not exist when formulating my coherent design strategy.)

Typeface

Flama Semicondensed

AaBbCcDdEeFfGgHhIiJjKk
LlMmNnOoPpQqRrSsTtUuVv
WwXxYyZz&1234567890

Flama, by Portugese type designer Mário Feliciano, is reminiscent of DIN, originally a signage typeface, and Johnson, used by the London Underground for decades. Its Semicondensed width is compact while still being readable. The open counters increase legibility, and the 'tailed' lowercase "l", numeral "1", and optional serif "I" are all distinct.

Colours

Pantone 286 C
Expo Line

Pantone 116 C
Millennium Line

Pantone 313 C
Canada Line

Pantone 2602 C
West Coast Express

Pantone 339 C
SeaBus

Pantone 021 C
Buses,
99 B-Line

Pantone 356 C
97 B-Line,
Evergreen Line
(future)

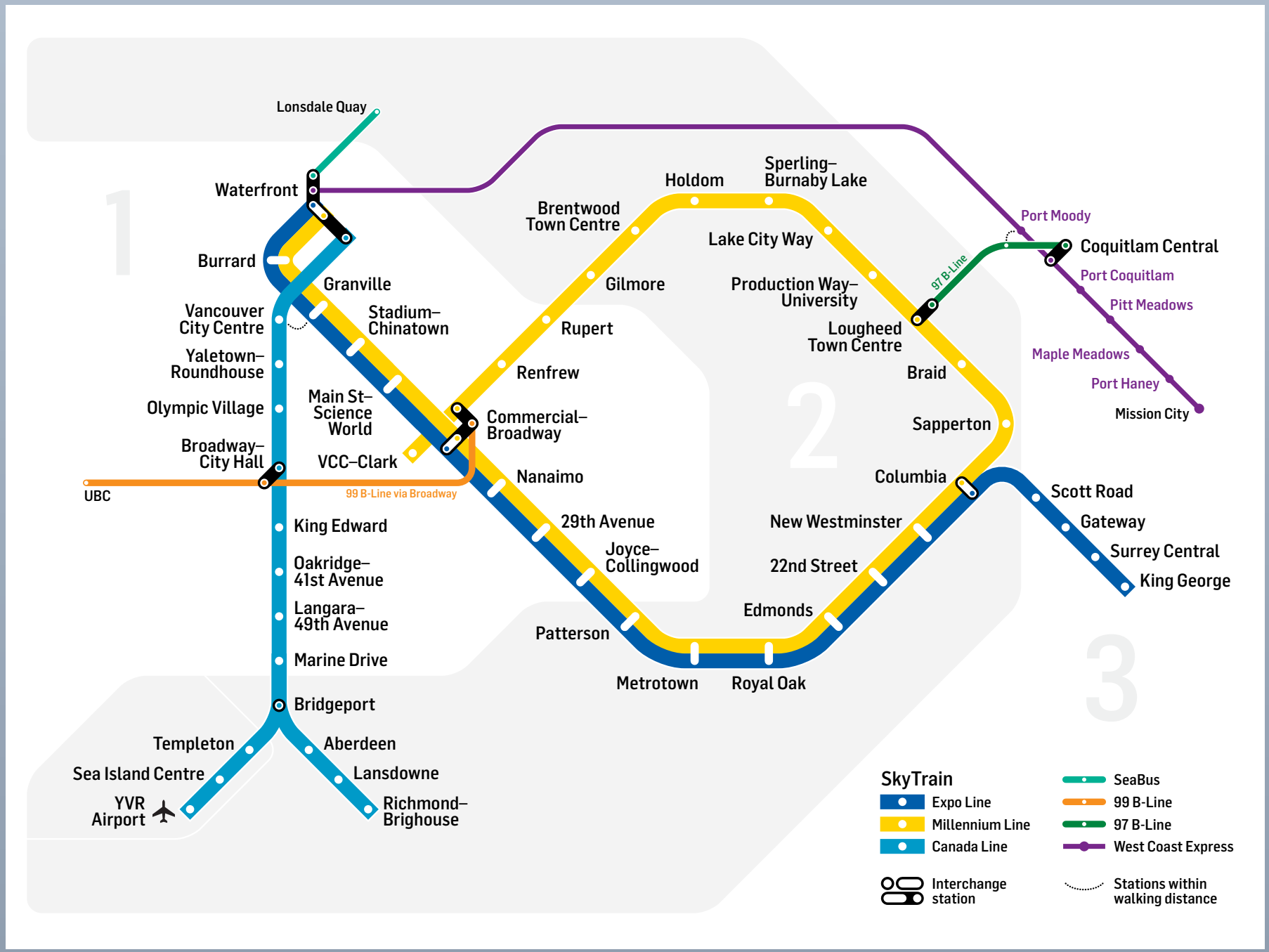
Pantone 540 C
Signage

The colours of the SkyTrain lines, the West Coast Express, and buses have been left unchanged, as they're already widely associated with their respective services.

In the past, the SeaBus has been inconsistently indicated with orange, light blue and brownish-grey. I have chosen a bright blue-green colour for the SeaBus.

I have specified green as the colour of the 97 B-Line, which is not currently associated with any specific colour. When the 97 is replaced by the SkyTrain Evergreen Line, it will use this same green for continuity.

SkyTrain station signage uses a navy blue for certain signs.

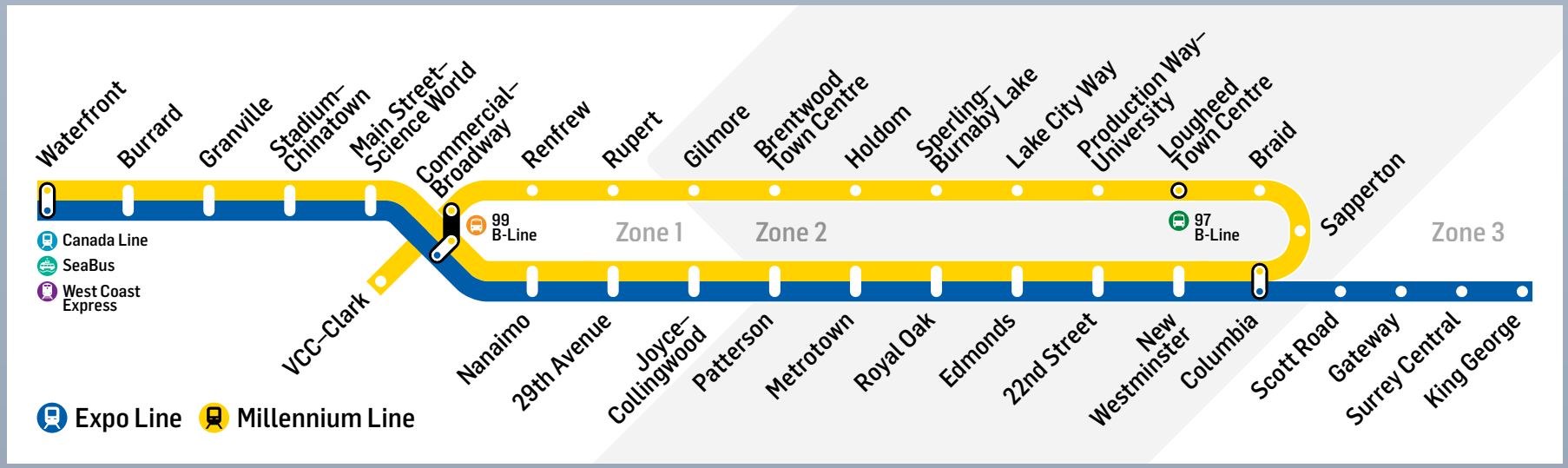

Lonsdale Quay
Waterfront
Burrard
Granville
Vancouver City Centre
Stadium–Chinatown
Yaletown–Roundhouse
Olympic Village
Main St–Science World
Broadway–City Hall
VCC–Clark
Commercial–Broadway
UBC
99 B-Line via Broadway
King Edward
Oakridge–41st Avenue
Langara–49th Avenue
Marine Drive
Bridgeport
Templeton
Sea Island Centre
YVR Airport
Aberdeen
Lansdowne
Richmond–Brighouse
Brentwood Town Centre
Holdom
Sperling–Burnaby Lake
Lake City Way
Gilmore
Production Way–University
Rupert
Renfrew
Nanaimo
29th Avenue
Joyce–Collingwood
Patterson
Metrotown
Royal Oak
Edmonds
22nd Street
New Westminster
Columbia
Sapperton
Braid
Lougheed Town Centre
97 B-Line
Port Moody
Coquitlam Central
Port Coquitlam
Pitt Meadows
Maple Meadows
Port Haney
Mission City
Scott Road
Gateway
Surrey Central
King George
1
2
3
SkyTrain
Expo Line
Millennium Line
Canada Line
Interchange station
SeaBus
99 B-Line
97 B-Line
West Coast Express
Stations within walking distance

System diagram

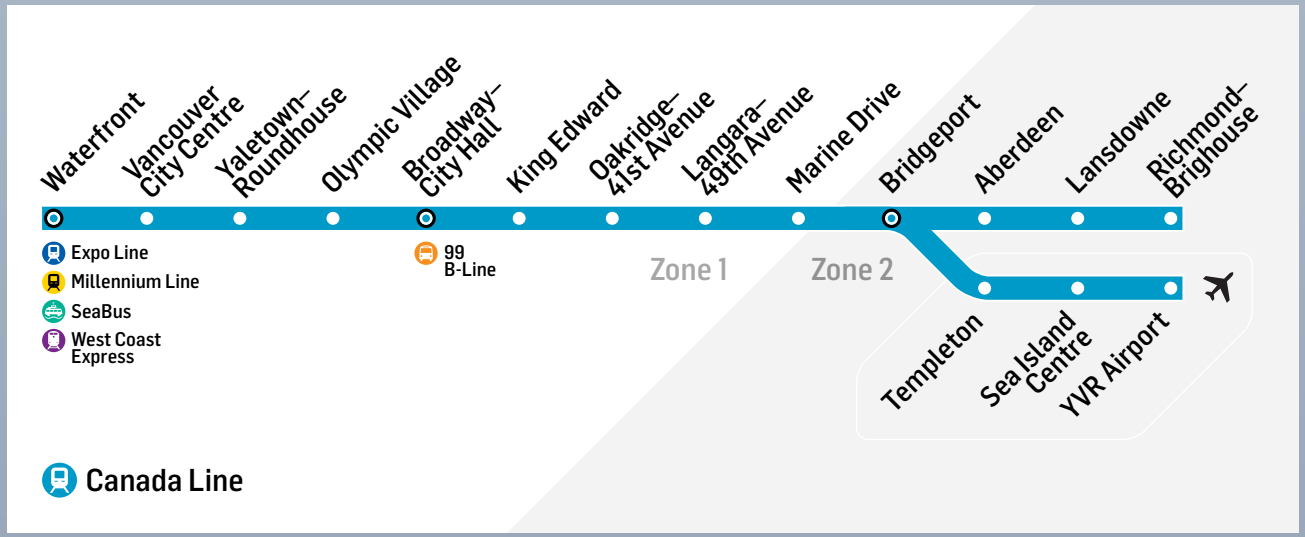
The system diagram shows rapid transit services, including B-Line buses, and the connections among these services.

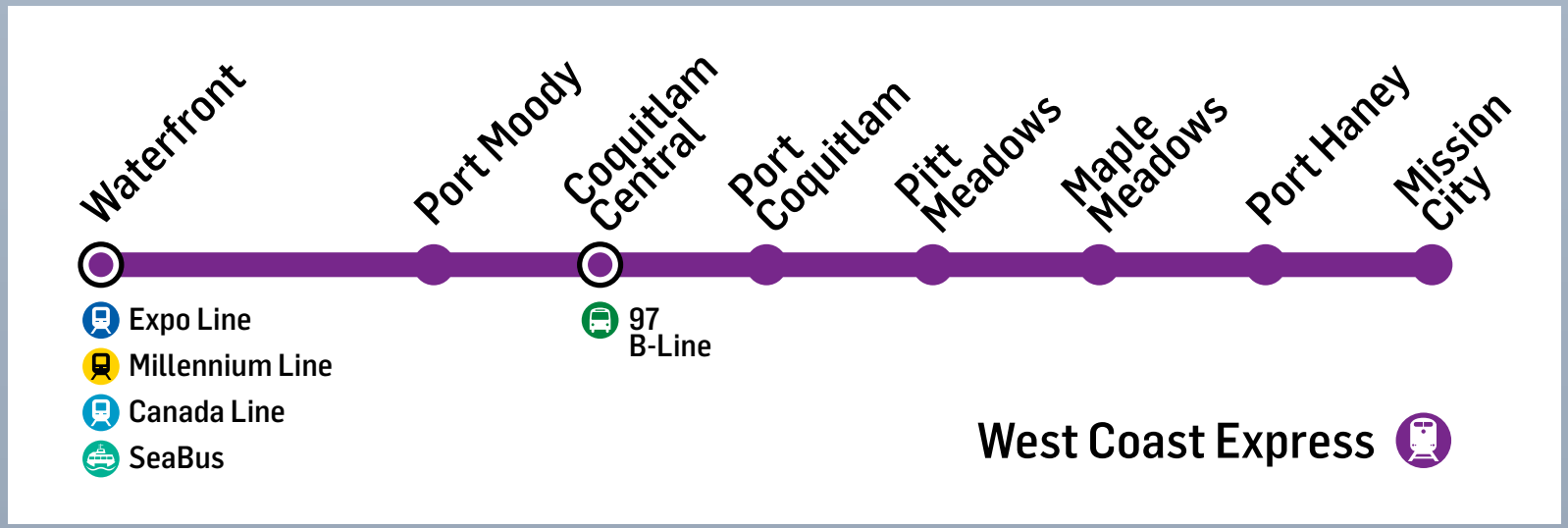
It is not intended to be used as a geographic map, although it still suggests the overall shape of the system, and physical features are still referenced as a navigational aid (including, for example, the distinctive curve between Burrard and Waterfront stations, and the Millennium Line passing under the combined Expo/Millennium Line at Commercial–Broadway).

The consistent visual language established by the system diagram is then extended to additional diagrams and other instances of information design.


Waterfront
Burrard
Granville
Stadium–Chinatown
Main Street–Science World
Commercial–Broadway
Renfrew
Rupert
Gilmore
Brentwood Town Centre
Holdom
Sperling–Burnaby Lake
Lake City Way
Production Way–University
Lougheed Town Centre
Braid
Sapperton
99 B-Line
97 B-Line
Zone 1
Zone 2
Zone 3
Canada Line
SeaBus
West Coast Express
VCC–Clark
Nanaimo
29th Avenue
Joyce–Collingwood
Patterson
Metrotown
Royal Oak
Edmonds
22nd Street
New Westminster
Columbia
Scott Road
Gateway
Surrey Central
King George
Expo Line
Millennium Line

In-car diagrams




Waterfront
Port Moody
Coquitlam Central
Port Coquitlam
Pitt Meadows
Maple Meadows
Port Haney
Mission City
Expo Line
Millennium Line
Canada Line
SeaBus
97 B-Line
West Coast Express

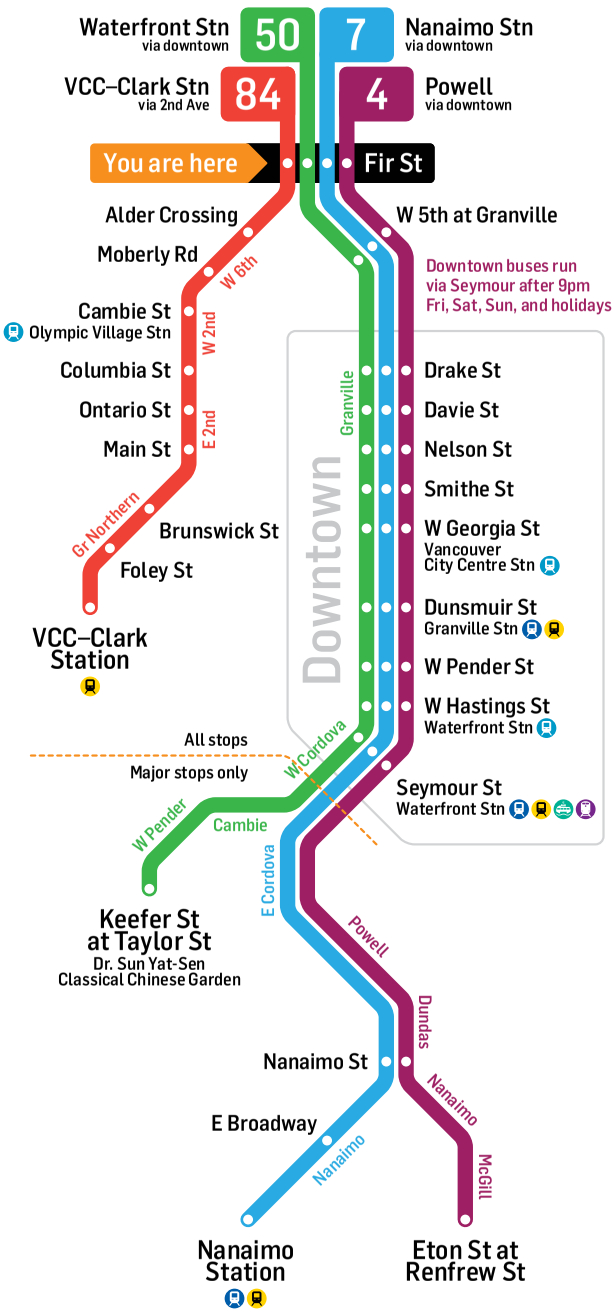
In-car diagrams

These diagrams designed for use inside SkyTrain and West Coast Express use the same visual language, but with a different set of design requirements.

Each diagram is completely linear, showing lines and stations with even less reference to physical geography. The diagrams are long and thin, to fit into the space available for them, and the type is large enough to be read from a seated position on the opposite side of the car.

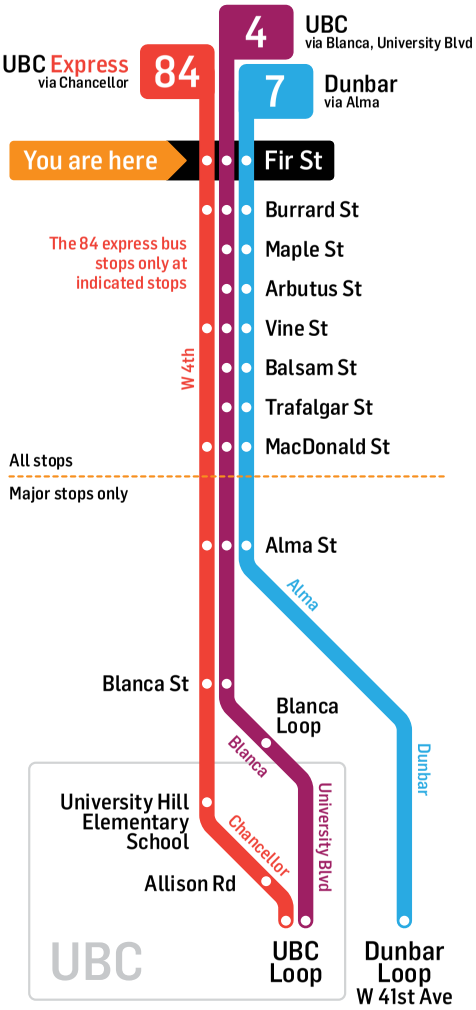
W 4th Ave at Fir St
Eastbound buses

Stop No. 50401 SMS to 33333 for next bus arrivals



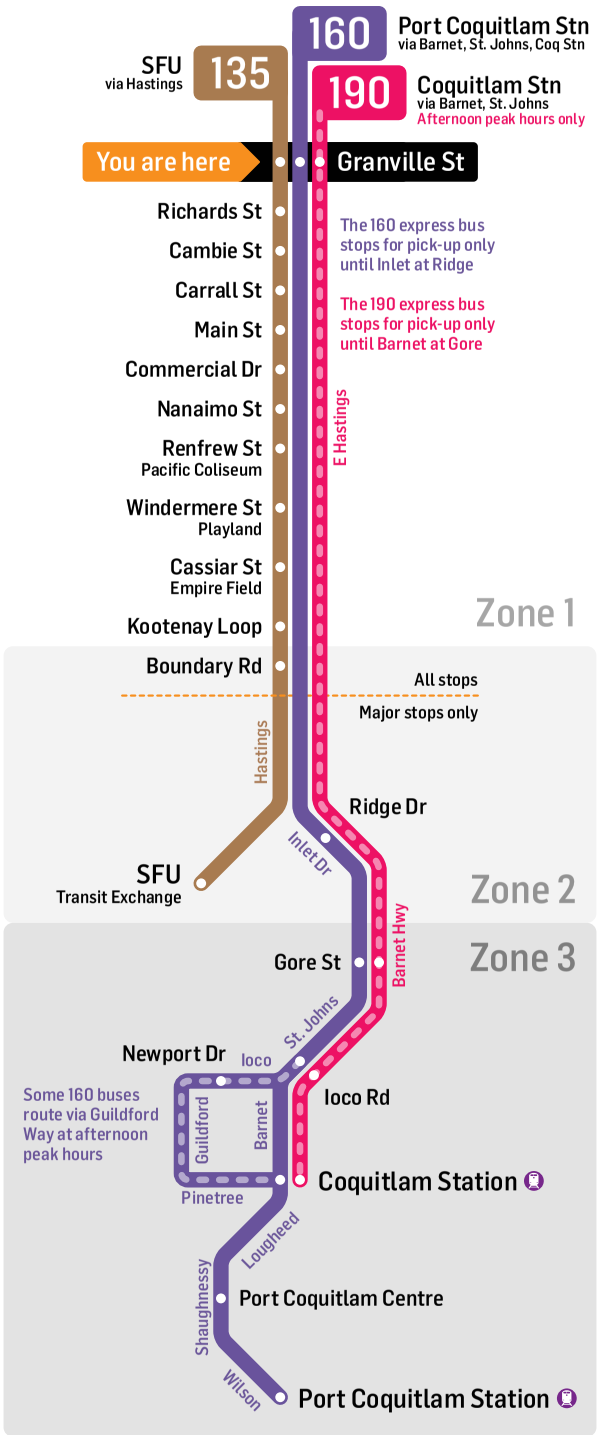
W 4th Ave at Fir St
Westbound buses

Stop No. 50578 SMS to 33333 for next bus arrivals



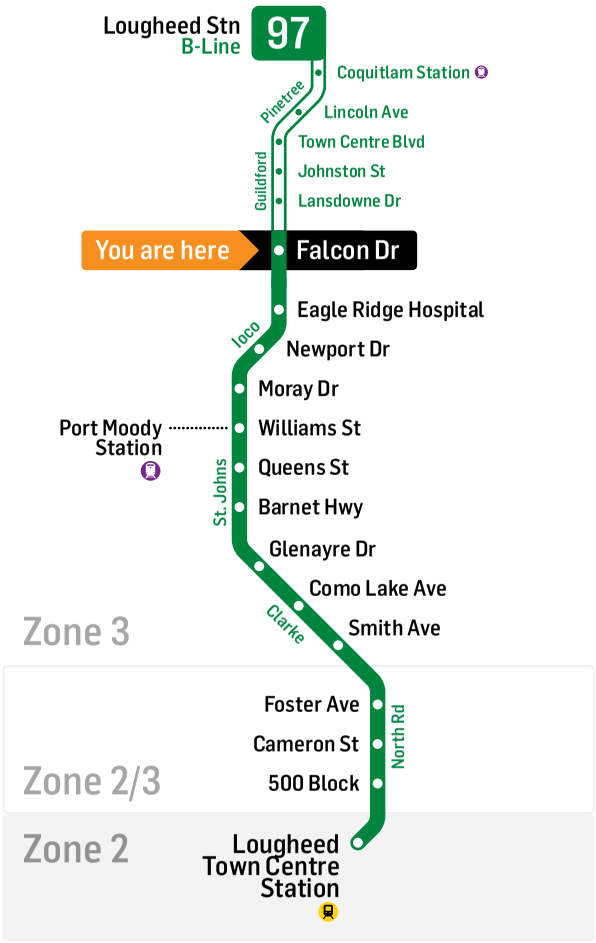
W Hastings at Granville
Eastbound buses

Stop No. 51374 SMS to 33333 for next bus arrivals



Guildford at Falcon Dr
97 B-Line

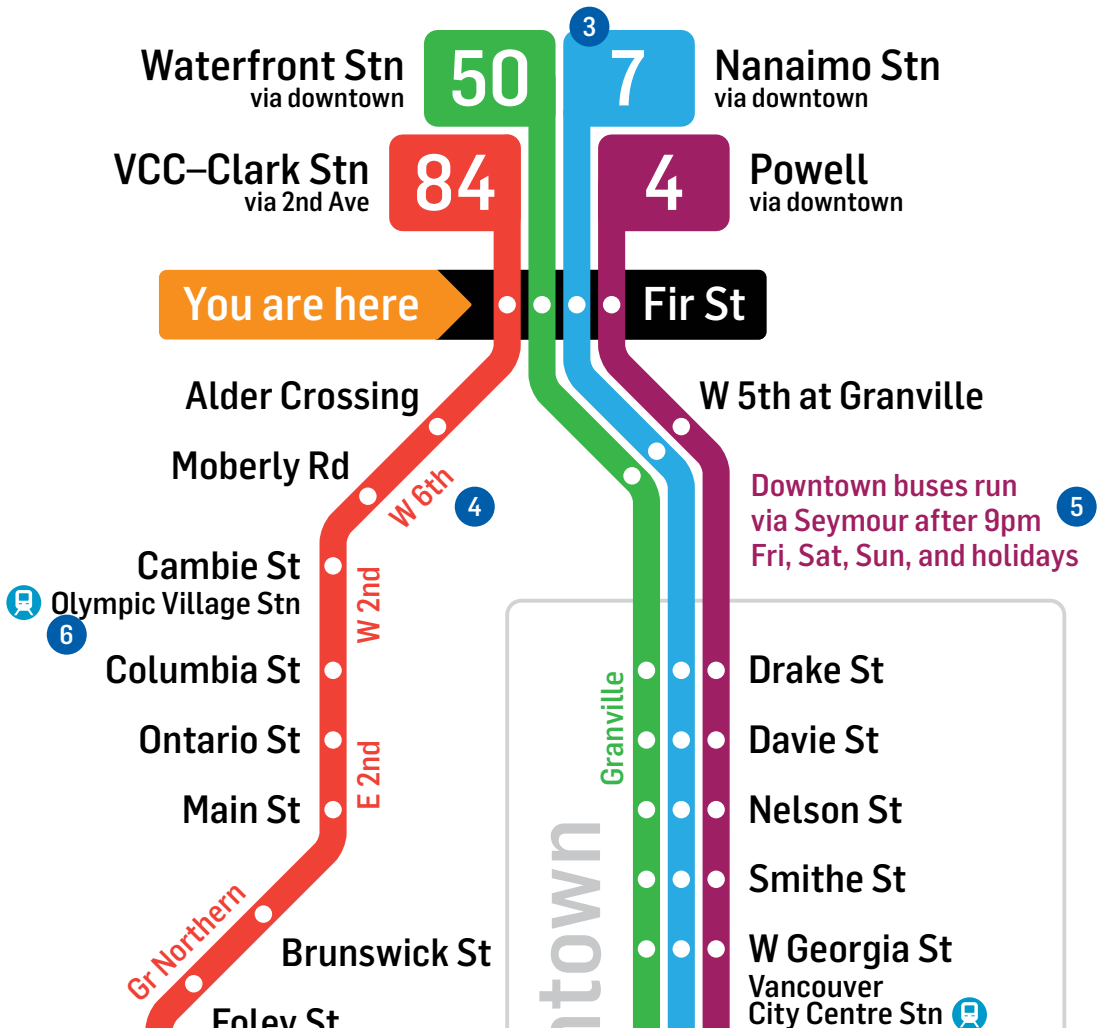
Stop No. 53280 SMS to 33333 for next bus arrivals



W 4th Ave at Fir St [1]

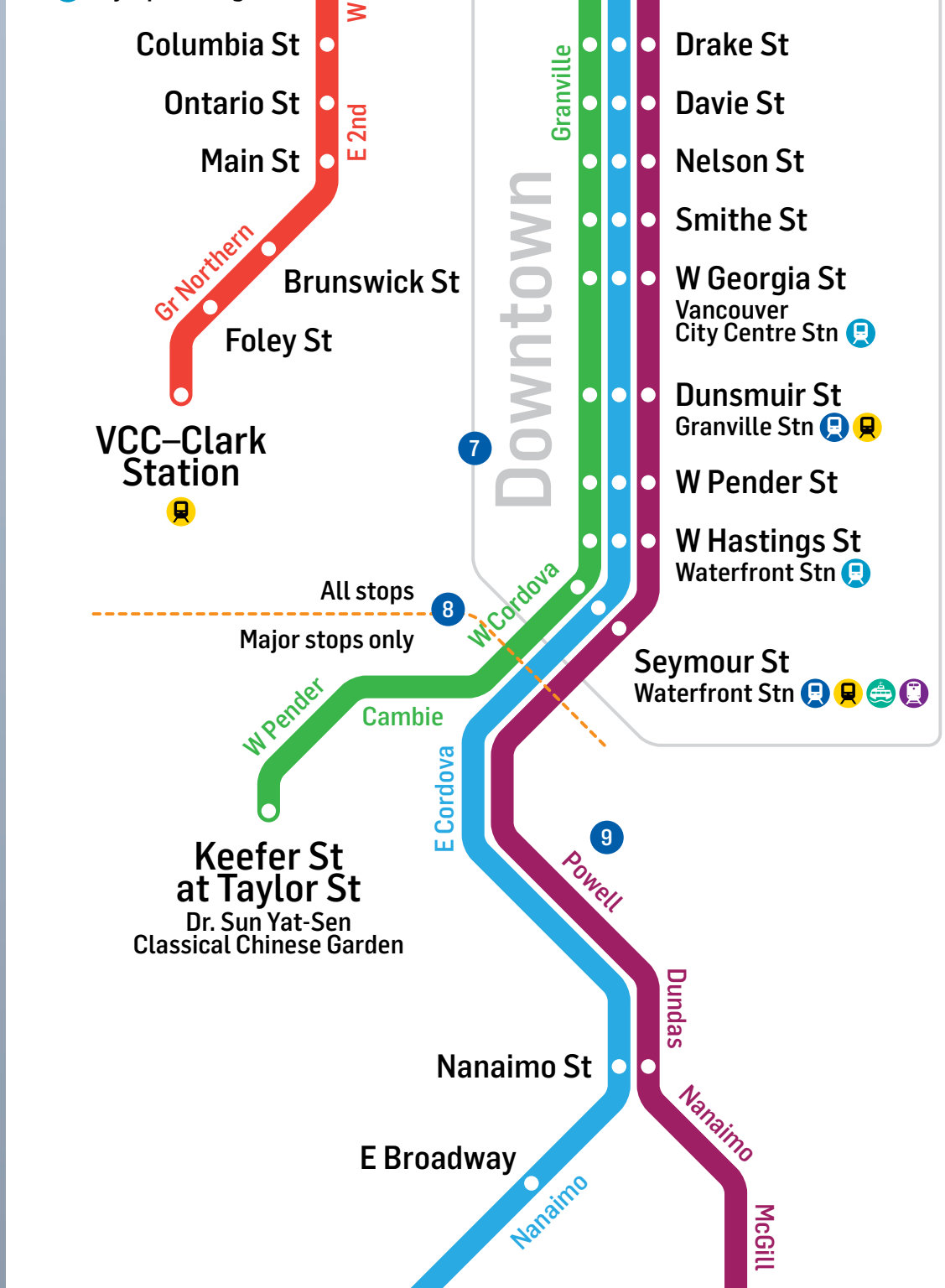
Eastbound buses

Stop No. 50401 [2] SMS to 33333 for next bus arrivals



Bus stop destination strip diagram

1. The header lists the intersection where the stop is located and the direction of buses from that stop.
2. The stop number is clearly displayed with instructions on how to check next bus arrivals by SMS.
3. Each route that serves the stop is given an arbitrary unique colour. Route numbers and names are listed, along with a brief description of where the route travels through.
4. The streets that a route runs along are displayed running parallel to the line of the route.
5. Additional information about certain routes is noted.
6. Transit connections are indicated textually and graphically.

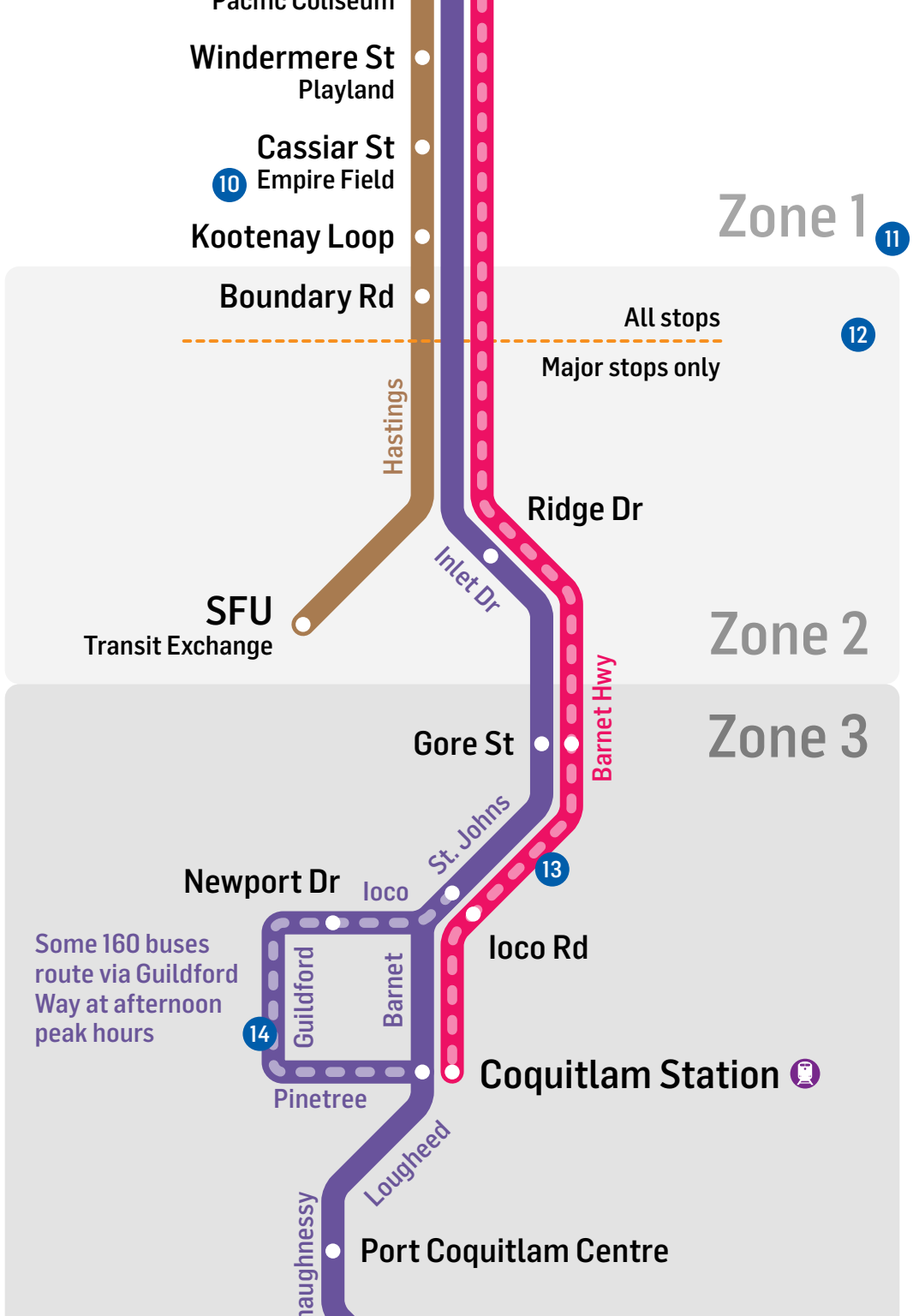

Columbia St
Ontario St
Main St
E 2nd
Gr Northern
Brunswick St
Foley St
VCC–Clark Station
7
Granville
Downtown
Drake St
Davie St
Nelson St
Smithe St
W Georgia St
Vancouver City Centre Stn
Dunsmuir St
Granville Stn
W Pender St
W Hastings St
Waterfront Stn
All stops
8
Major stops only
W Cordova
Seymour St
Waterfront Stn
W Pender
Cambie
E Cordova
9
Powell
Keefer St at Taylor St
Dr. Sun Yat-Sen Classical Chinese Garden
Dundas
Nanaimo St
Nanaimo
E Broadway
Nanaimo
McGill

Bus stop destination strip diagram

7 Relevant areas or neighbourhoods may be indicated.

8 Only major stops (stations, bus loops, attractions, important cross streets, termini, etc.) are indicated after a certain point. Distance, relevance and available space are taken into consideration.

9 The streets a route runs along are still shown.


Pacific Coliseum
Windermere St
Playland
Cassiar St
10
Empire Field
Kootenay Loop
Boundary Rd
Zone 1
11
All stops
12
Major stops only
Hastings
Ridge Dr
Inlet Dr
SFU
Transit Exchange
Zone 2
Barnet Hwy
Zone 3
Gore St
St. Johns
Newport Dr
Ioco
13
Ioco Rd
Some 160 buses route via Guildford Way at afternoon peak hours
14
Guildford
Barnet
Coquitlam Station
Pinetree
Lougheed
Port Coquitlam Centre

Bus stop destination strip diagram

10 Major attractions near stops are indicated in addition to the intersection.

11 Fare zones are only shown when at least one bus from a stop crosses a fare zone.

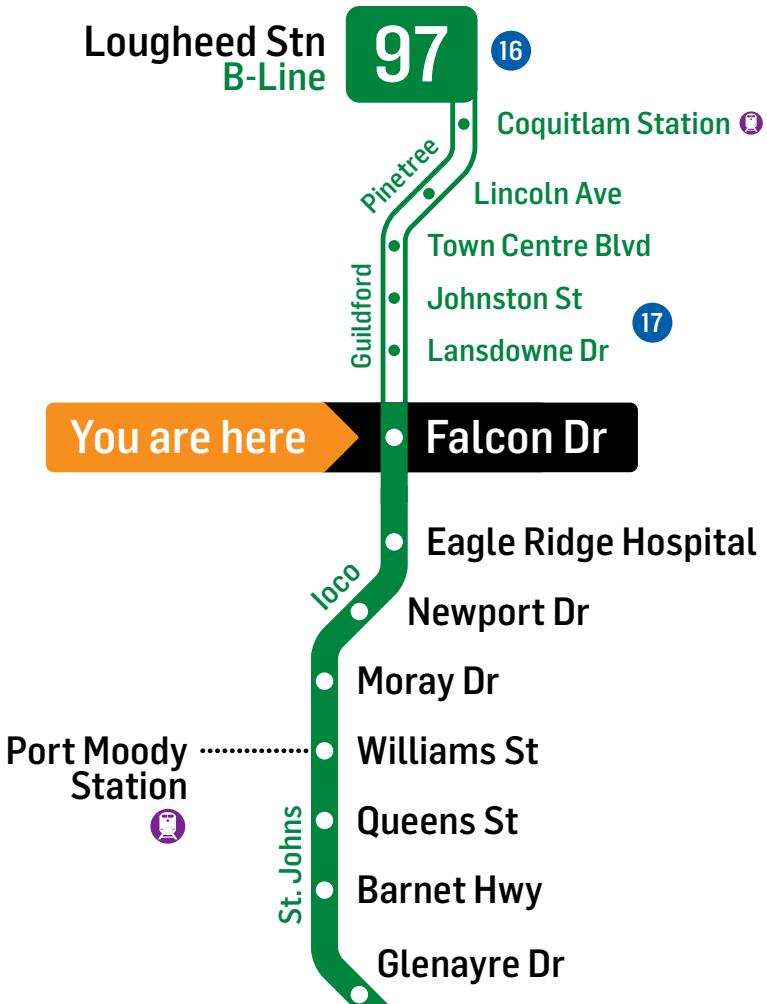
12 Zones are shaded from the perspective of the viewer. The zone the stop is located in is not shaded. A darker shade is two zones away.

13 A dashed line indicates a limited
14 service, such as a bus that runs at peak hours only or a variation on a bus's regular route.

Guildford at Falcon Dr

97 B-Line 15

Stop No. 53280 SMS to 33333 for next bus arrivals

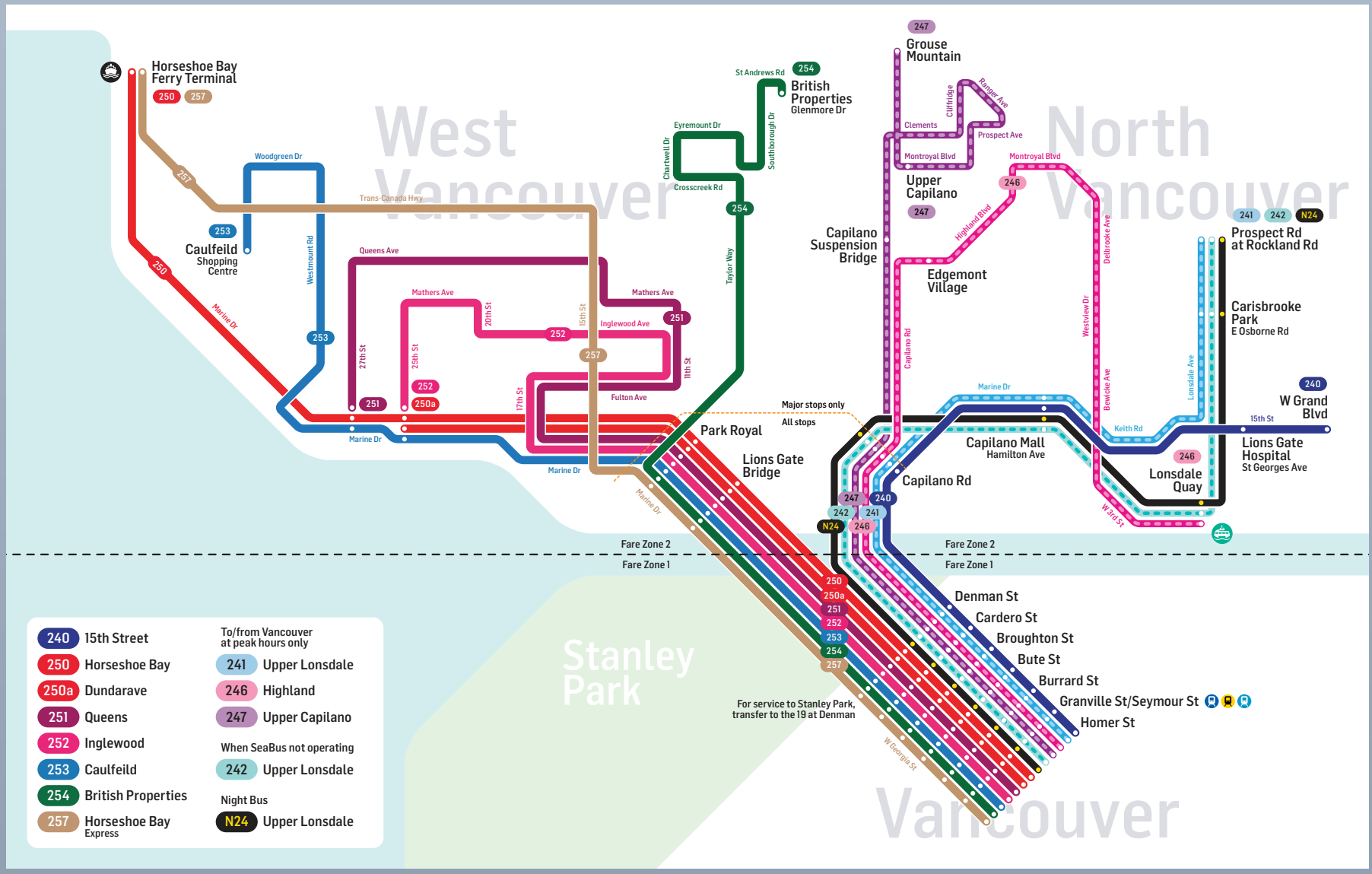


Bus stop destination strip diagram

15 The B-Line label indicates a service is limited-stop and high-frequency. A B-Line service may be displayed on its own diagram to reflect the intended purpose of the service.

16 B-Line services are given unique colours that should remain constant across diagrams. The 99 uses orange and the 97 uses green, which will be used in the future by the SkyTrain Evergreen Line that will replace it.

17 To further establish the intended purpose of the B-Line service, the entire route is shown at every stop.

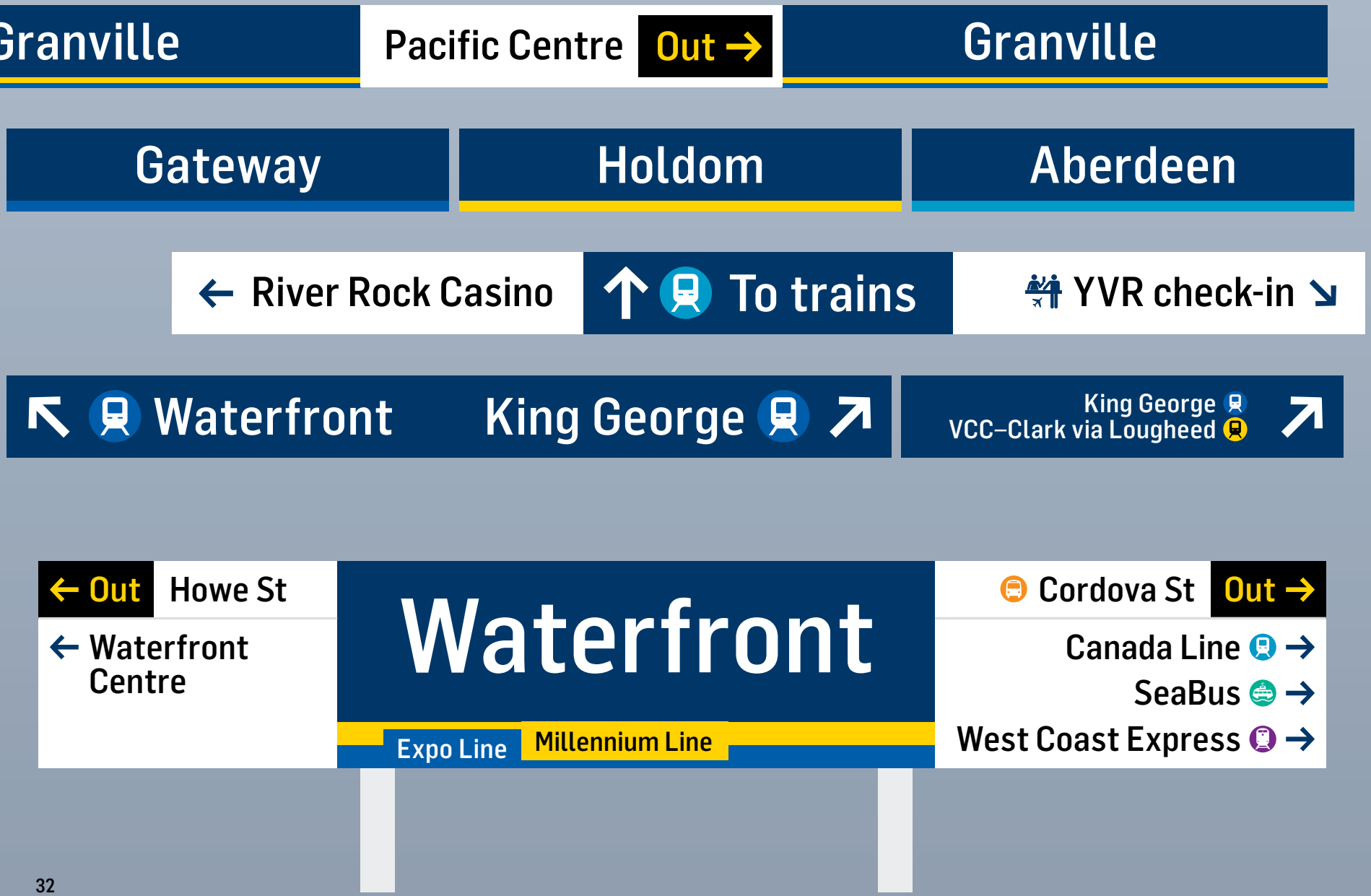

West Vancouver
North Vancouver
Vancouver
Stanley Park
Horseshoe Bay Ferry Terminal
250 257
Trans-Canada Hwy
Woodgreen Dr
253
Caulfeild Shopping Centre
Westmount Rd
Marine Dr
Queens Ave
Mathers Ave
20th St
15th St
Inglewood Ave
251
252
250a
257
27th St
25th St
17th St
11th St
Fulton Ave
Marine Dr
St Andrews Rd
254
British Properties
Glenmore Dr
Eyremount Dr
Chartwell Dr
Southborough Dr
Crosscreek Rd
Taylor Way
247
Grouse Mountain
Clements
Cliffridge
Ranger Ave
Prospect Ave
Montroyal Blvd
Upper Capilano
Capilano Suspension Bridge
Highland Blvd
246
Edgemont Village
Capilano Rd
Westview Dr
Delbrooke Ave
241 242 N24
Prospect Rd at Rockland Rd
Carisbrooke Park
E Osborne Rd
Lonsdale Ave
240
W Grand Blvd
15th St
Keith Rd
Lions Gate Hospital
St Georges Ave
Lonsdale Quay
W 3rd St
Major stops only
All stops
Park Royal
Lions Gate Bridge
Marine Dr
Capilano Mall
Hamilton Ave
Capilano Rd
247
240
242
241
N24
246
Fare Zone 2
Fare Zone 1
Fare Zone 2
Fare Zone 1
250
250a
251
252
253
254
257
Denman St
Cardero St
Broughton St
Bute St
Burrard St
Granville St/Seymour St
Homer St
W Georgia St
For service to Stanley Park, transfer to the 19 at Denman
240 15th Street
250 Horseshoe Bay
250a Dundarave
251 Queens
252 Inglewood
253 Caulfeild
254 British Properties
257 Horseshoe Bay Express
To/from Vancouver at peak hours only
241 Upper Lonsdale
246 Highland
247 Upper Capilano
When SeaBus not operating
242 Upper Lonsdale
Night Bus
N24 Upper Lonsdale

Detailed bus diagram

The detailed bus diagram shows every bus route within a certain area—in this case, buses from Georgia Street in Vancouver to the North Shore. It may be displayed when more space is available and more detail than the strip diagram is required.

As on the strip diagram, major destinations, transit connections, roads, and termini are shown, and limited services are indicated with a dashed line.

The increased size of this bus diagram allows more detail to be added. Some geographic features, such as Burrard Inlet and Stanley Park, are included, and the paths of the routes are abstracted from the physical shape of the route.


Granville
Pacific Centre
Out
Granville
Gateway
Holdom
Aberdeen
River Rock Casino
To trains
YVR check-in
Waterfront
King George
King George
VCC–Clark via Lougheed
Out
Howe St
Waterfront Centre
Waterfront
Expo Line
Millennium Line
Cordova St
Out
Canada Line
SeaBus
West Coast Express

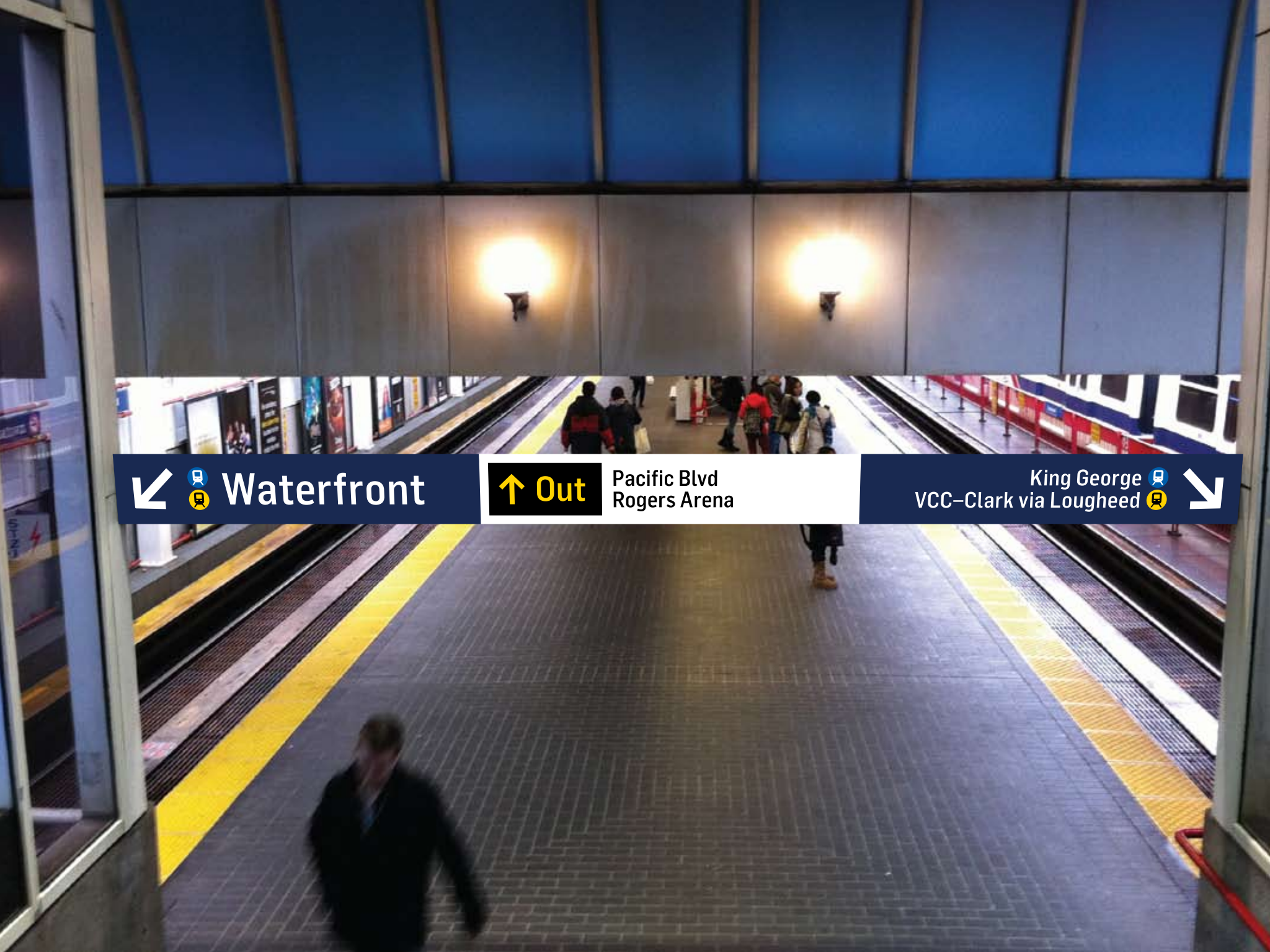
Signage system

The navy blue colour used in recently installed signage outside SkyTrain stations directs the user to the platform.

Transit connections, exits, and other services available in or near stations (such as YVR check-in kiosks on the Canada Line and underground connections to malls in downtown stations) are displayed on white.

The colours and icons associated with the various SkyTrain lines and other services continue to be used.


Buses
Lougheed Town Centre
Austin Road
Lougheed Mall
Out


Waterfront
Out
Pacific Blvd
Rogers Arena
King George
VCC–Clark via Lougheed

Waterfront

The ‘up’ escalator from the western Expo/ Millennium Line concourse to the Howe Street exit will be out of service from

Monday, February 14th until Friday, February 18th at 5:30pm.

Joyce – Collingwood

The elevator from the Joyce Street / Vanness Avenue entrance to the platform level will be out of service on

Tuesday, February 22nd from 9:00am to 3:00pm.

Brentwood Town Centre

The elevator from the concourse level to the Columbia–bound platform level will be out of service from Monday, February 25th until Friday, March 4th at 5:30pm.

Joyce – Collingwood

The elevator from the Joyce St / Vanness Ave entrance to the platform level will be out of service on Tuesday, February 22nd from 9:00am to 3:00pm.

Metrotown

Bicycles are not allowed at Metrotown station for safety reasons. Cyclists should board at Patterson (a 3min ride) or Royal Oak (a 7min ride) instead.

Waterfront

The ‘up’ escalator from the western Expo/ Millennium Line concourse to the Howe St exit will be out of service from Monday, February 14th until Friday, February 18th at 5:30pm.

Ad-hoc signage system

Temporary notices at SkyTrain stations, such as those warning of an upcoming elevator or escalator repair, are printed up and posted by the SkyTrain operator, without the involvement of TransLink design. It is often difficult to find out the most relevant points without having to stop and read through the whole poorly typeset flyer.

Templates based on standard paper sizes allow non-designers to easily indicate the station affected, which parts of that station are unavailable, and when the disruption is taking place.

50043

2	MacDonald–16th via Cornwall
5	Robson to Denman/Davie
22	MacDonald via Cornwall
32 PM peak hrs	Dunbar via Cornwall, W 4th
44 Mon–Fri	UBC via W 4th
N22	MacDonald–Dunbar

Bus stop

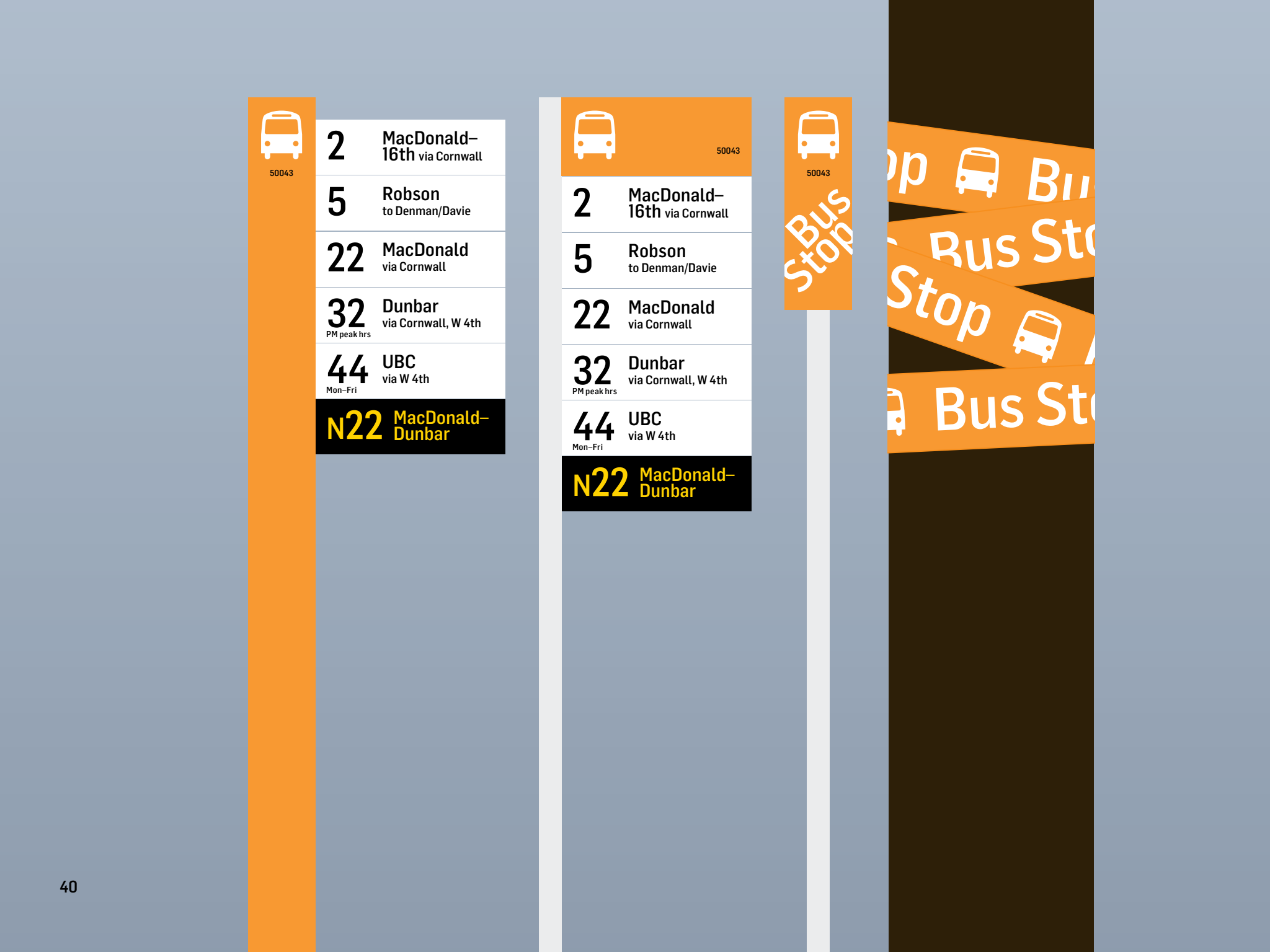
The bus stop design extends the use of orange as a symbol of bus service to the stop itself.

Each route is printed on a single panel. Panels are modular, eliminating the waste caused by fixed panels that must be completely replaced each time bus service to a stop is changed.

The information presented scales with distance: from far away, the transit user sees the bright orange strip indicating a bus stop; moving closer, the route numbers are visible, then the route names, then the brief descriptions on the sign.

Night bus services are indicated with a yellow-on-black panel.

For more detailed information, the destination strip diagram is attached to the bus stop.


50043
2 MacDonald–16th via Cornwall
5 Robson to Denman/Davie
22 MacDonald via Cornwall
32 Dunbar via Cornwall, W 4th
PM peak hrs
44 UBC via W 4th
Mon–Fri
N22 MacDonald–Dunbar
50043
2 MacDonald–16th via Cornwall
5 Robson to Denman/Davie
22 MacDonald via Cornwall
32 Dunbar via Cornwall, W 4th
PM peak hrs
44 UBC via W 4th
Mon–Fri
N22 MacDonald–Dunbar
50043
Bus Stop
Bus Stop
Stop
Bus Sto

Bus stop

The orange pillar (left) is the ideal stop design. It indicates a bus stop with or without attached route panels.

When this design is not possible, panels (second from left) or a single generic sign (third from left) may be attached to existing signposts.

When a temporary bus stop must be indicated, a tape (right) that wraps around existing street infrastructure, such as a light or telephone pole, may be used.


50 False Creek South
59525
THE VANCOUVER SUN

Credits

Project by Sam Dal Monte

Email: sam@dalmonte.ca
Website: sam.dalmonte.ca

Special thanks to:

My family, for their love and support

Casey Hrynkow, my Core Studio teacher,
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Richard Eriksson and Stephen Rees,
for retweeting and blogging my survey

Everyone who answered my survey anonymously

I found the following resources invaluable:

TransLink's blog The Buzzer (buzzer.translink.ca)

Carson Lam's transitdb.ca

Jarrett Walker's Human Transit blog
(humantransit.org)

Mark Ovenden's book Transit Maps of the World