



The Future of Vancouver's Viaducts

2015 Update

[#vanviaducts](#)

Process

2011

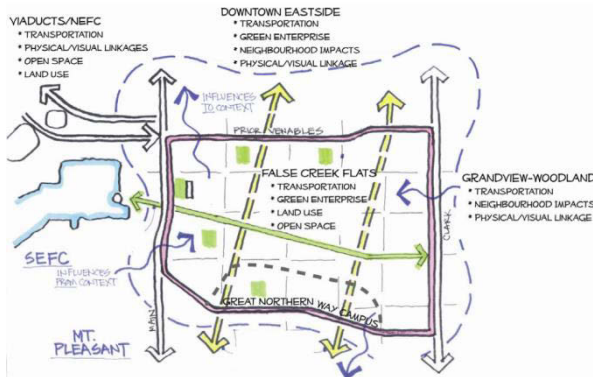
Eastern Core Report

2011

re:CONNECT
Competition

2013

Viaducts Council Report



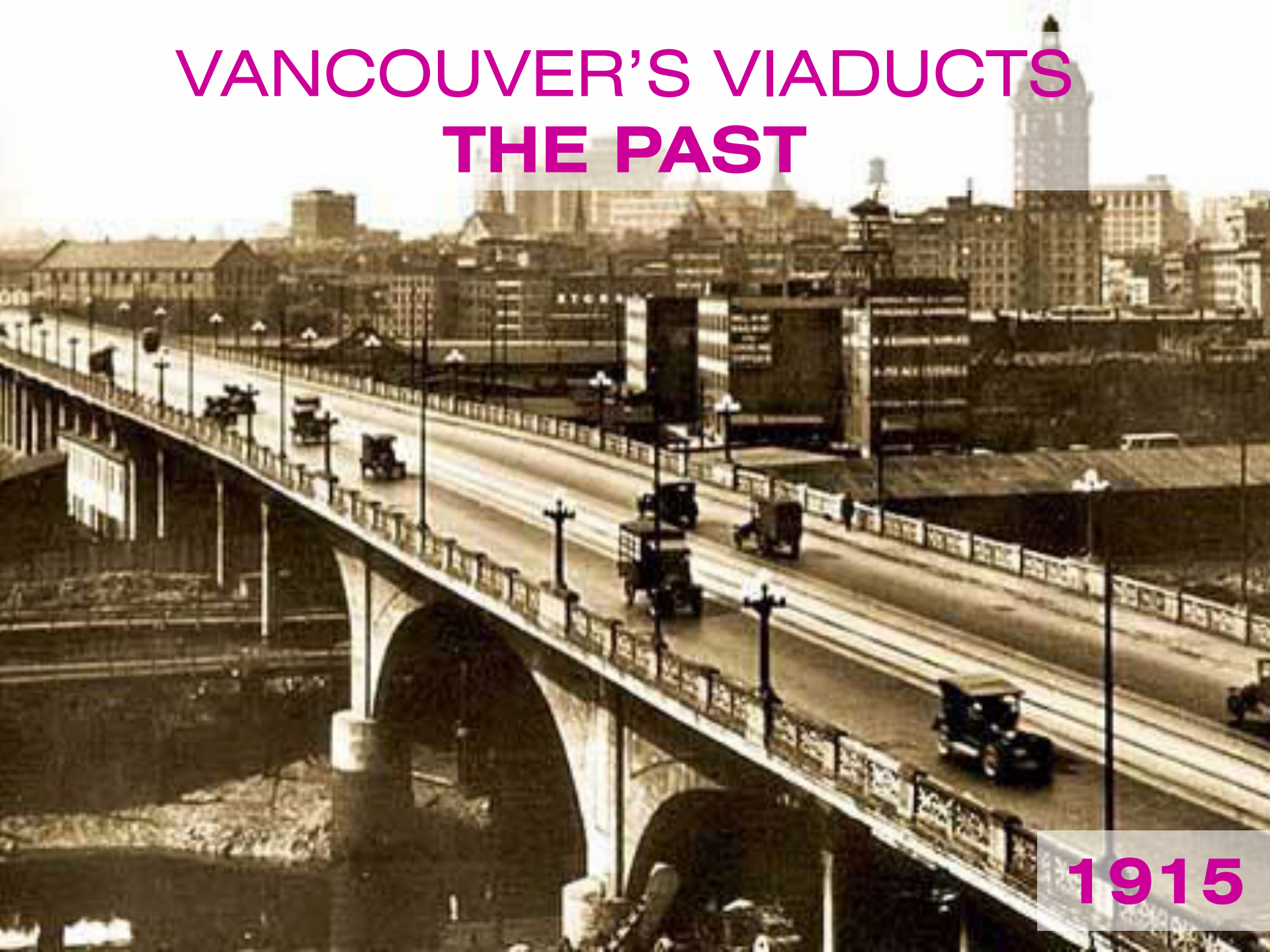
69%
SUPPORT

Of those polled Indicated
either **support**, or **strong**
support of the overall
concept

Process



VANCOUVER'S VIADUCTS THE PAST



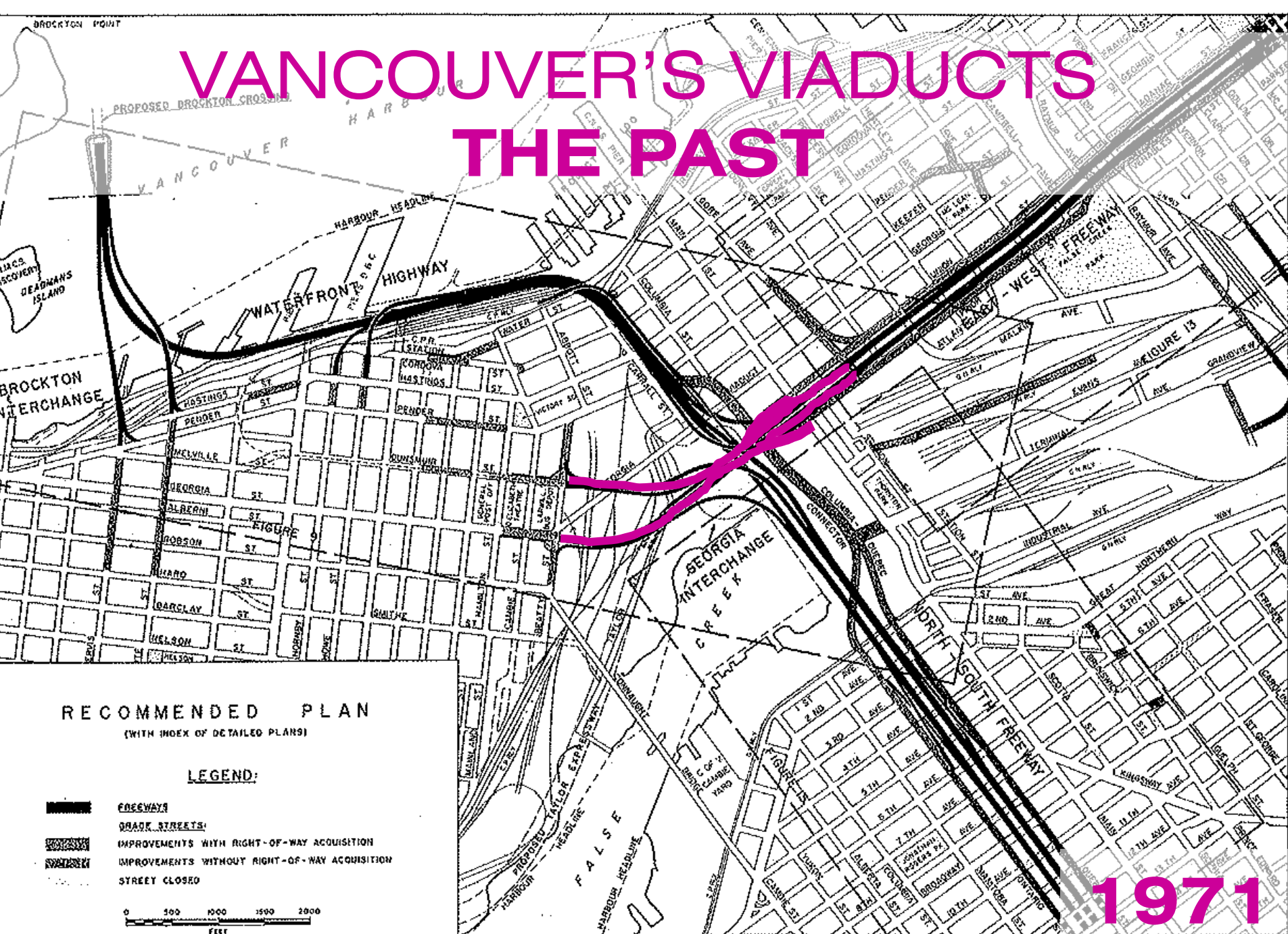
1915

VANCOUVER'S VIADUCTS THE PAST



1971

VANCOUVER'S VIADUCTS THE PAST





VANCOUVER'S VIADUCTS **THE PRESENT**

The viaducts are significant traffic routes but are costly to maintain and are seismically unstable

We aren't the first city to look at
this opportunity



San Francisco



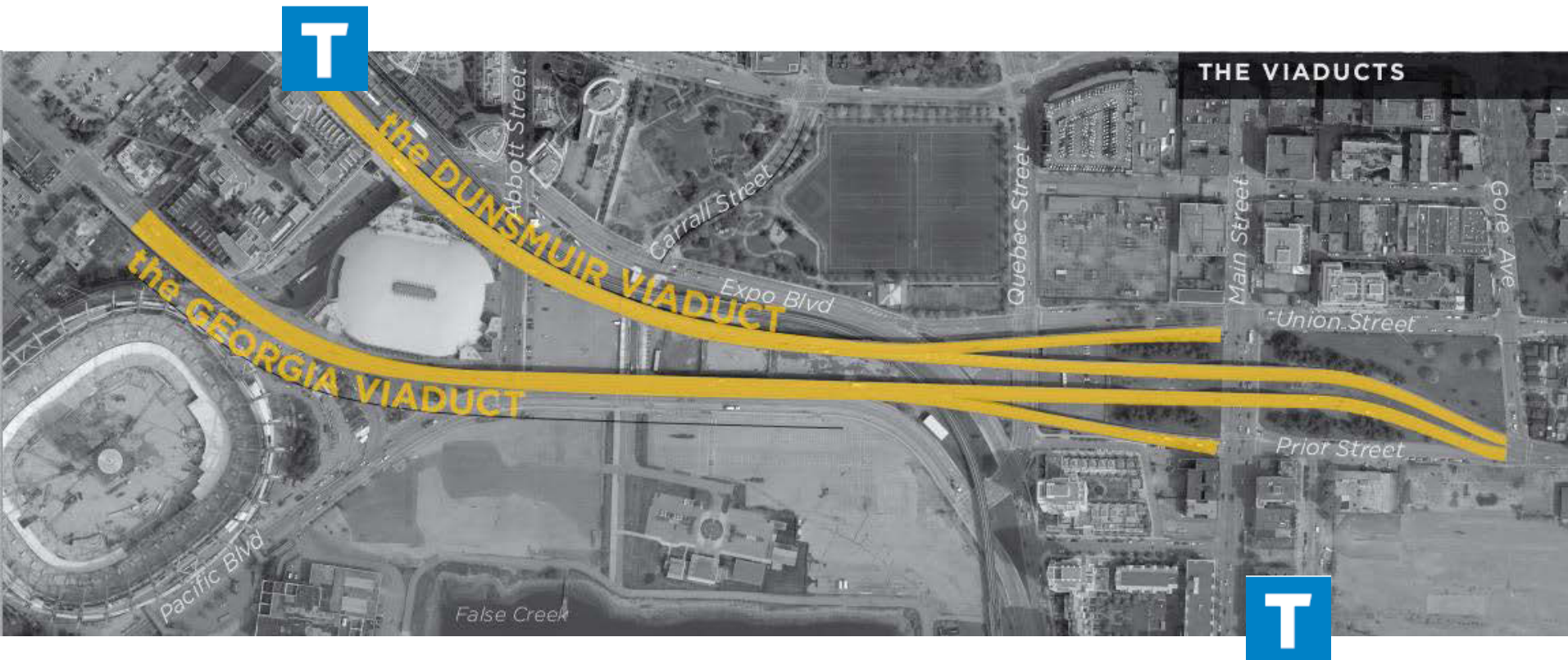
Boston



Madrid

VANCOUVER'S VIADUCTS

THE PRESENT



With capacity to carry upwards of 1,800 vehicles per lane per hour, the Georgia and Dunsmuir Viaducts carry only 750 vehicles per lane per hour during their busiest hours, less than half of their designed capacity.

COSTS OF MAINTENANCE

5-10X COST
vs. at-grade street



\$8-10M IN 15
YEARS

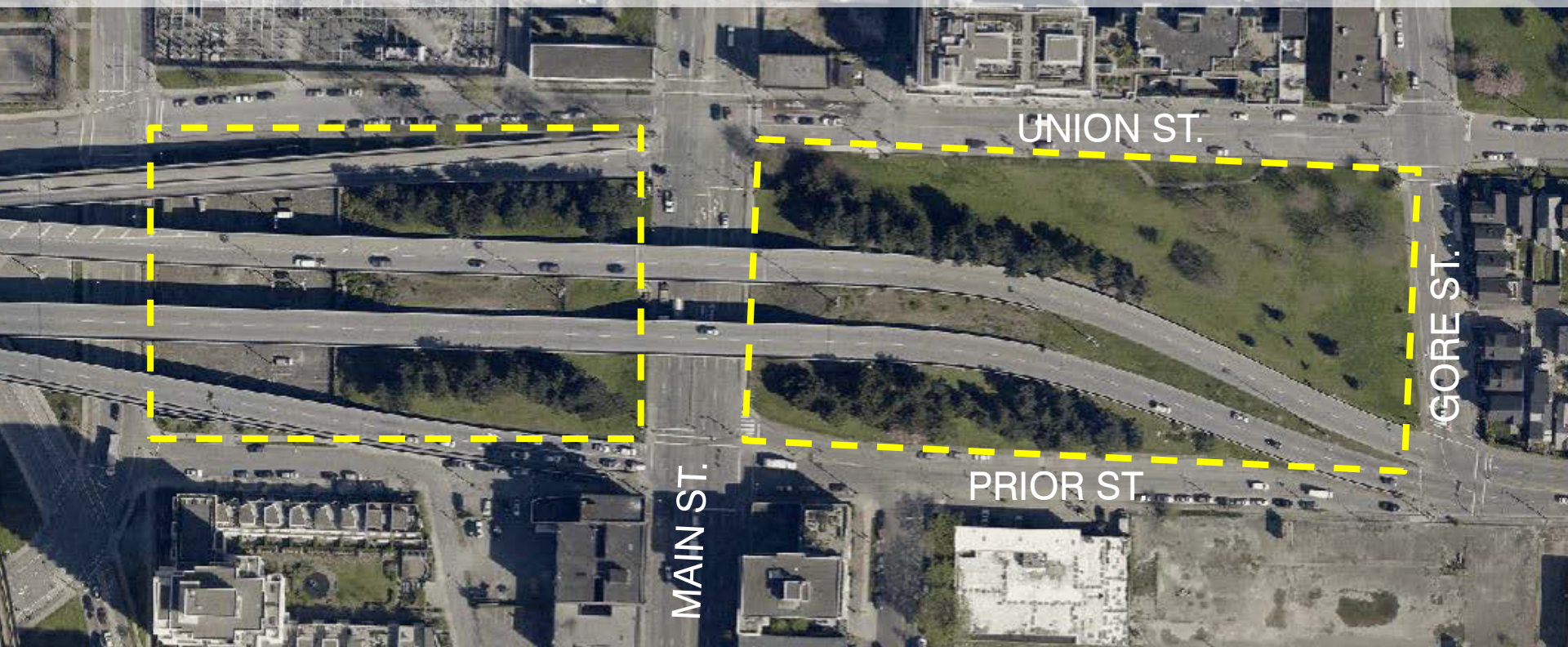
CUTTING OFF COMMUNITIES



Physical and psychological barrier

The space between and beneath the viaducts is largely inaccessible and unused.

UNDER-UTILIZED LAND



2 full city blocks are used for the down-ramps from the viaducts

Disconnects Main Street

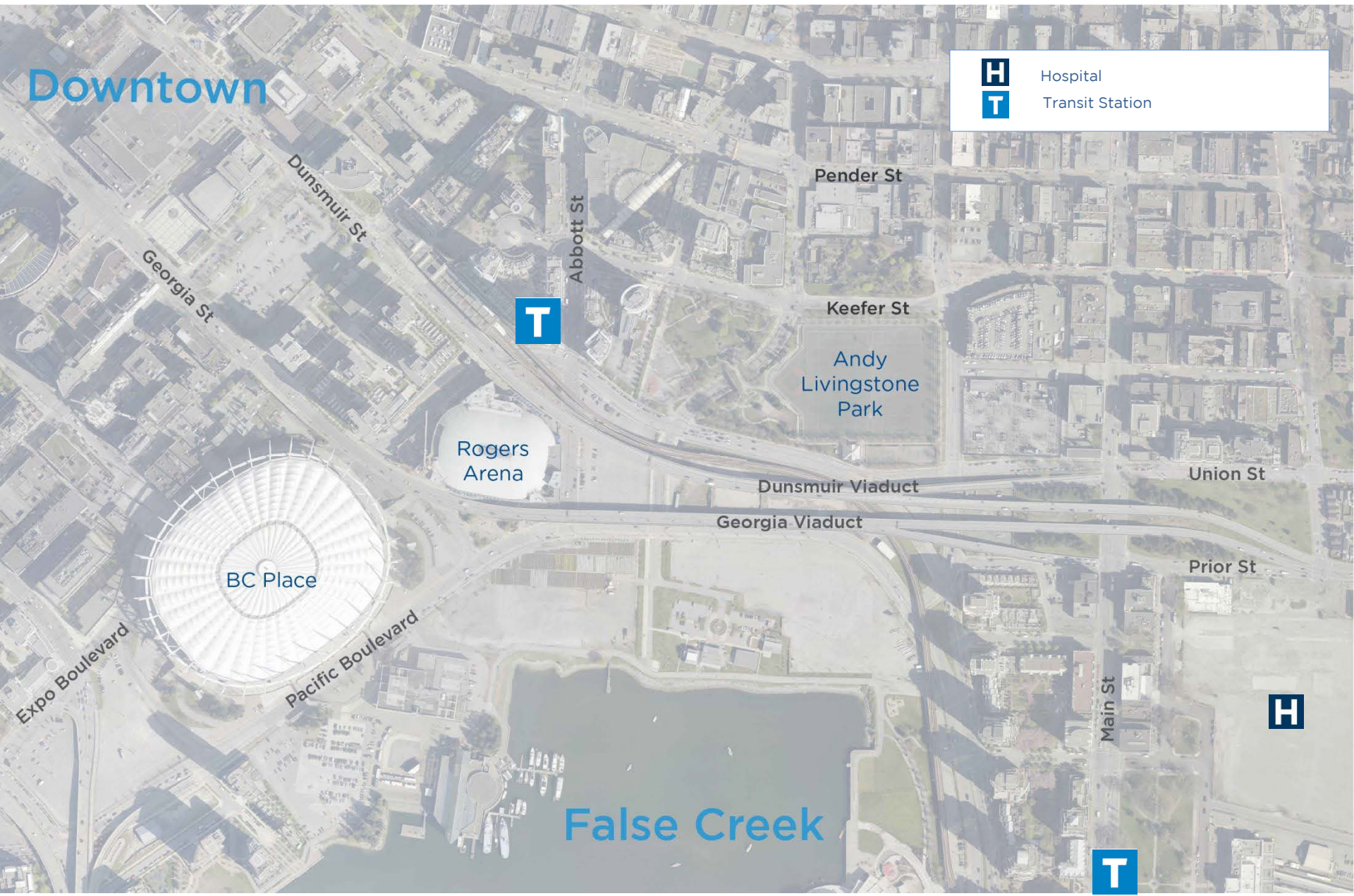
WINDOW OF OPPORTUNITY



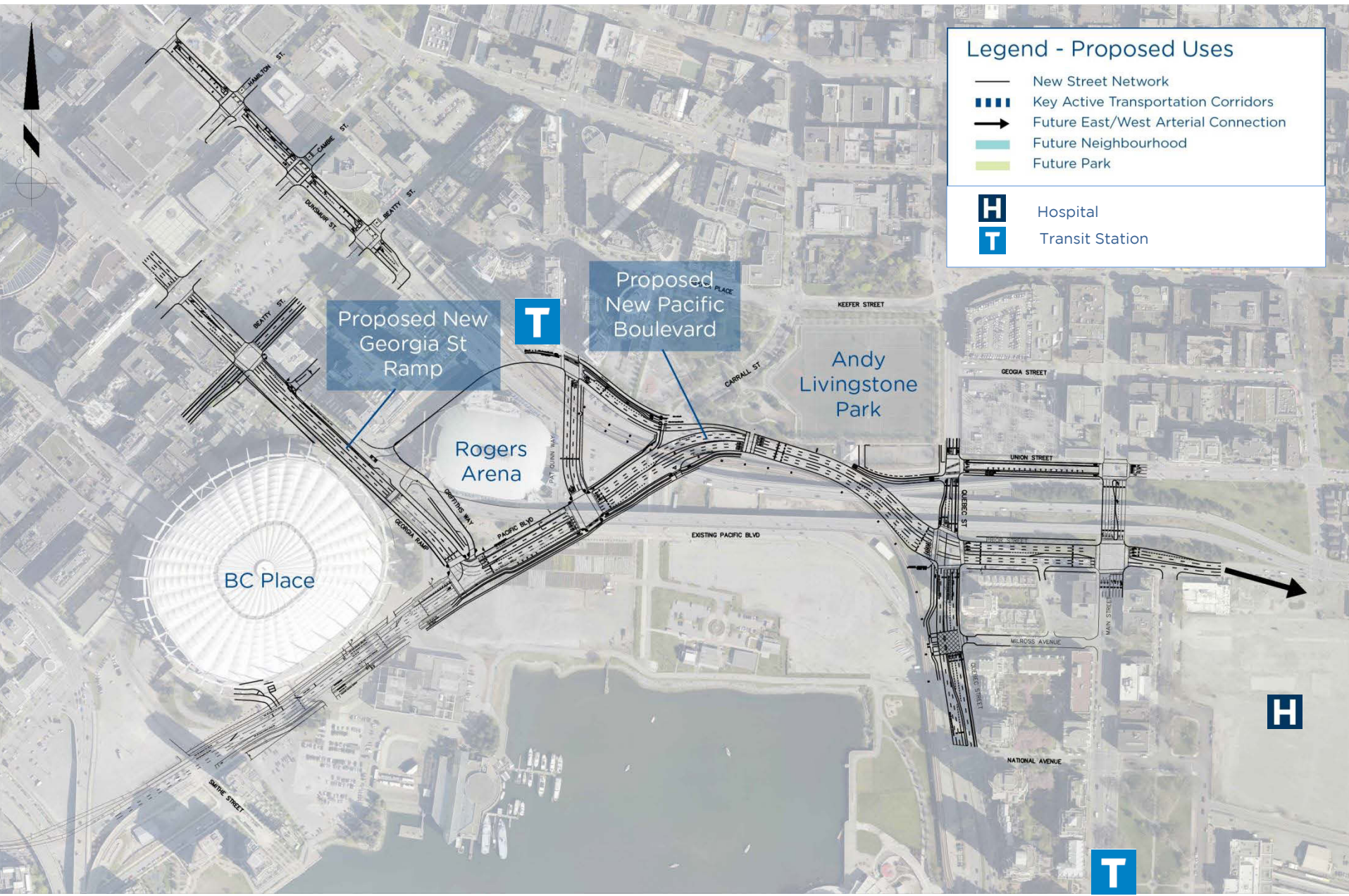
VANCOUVER'S VIADUCTS A BRIGHT GREEN FUTURE!



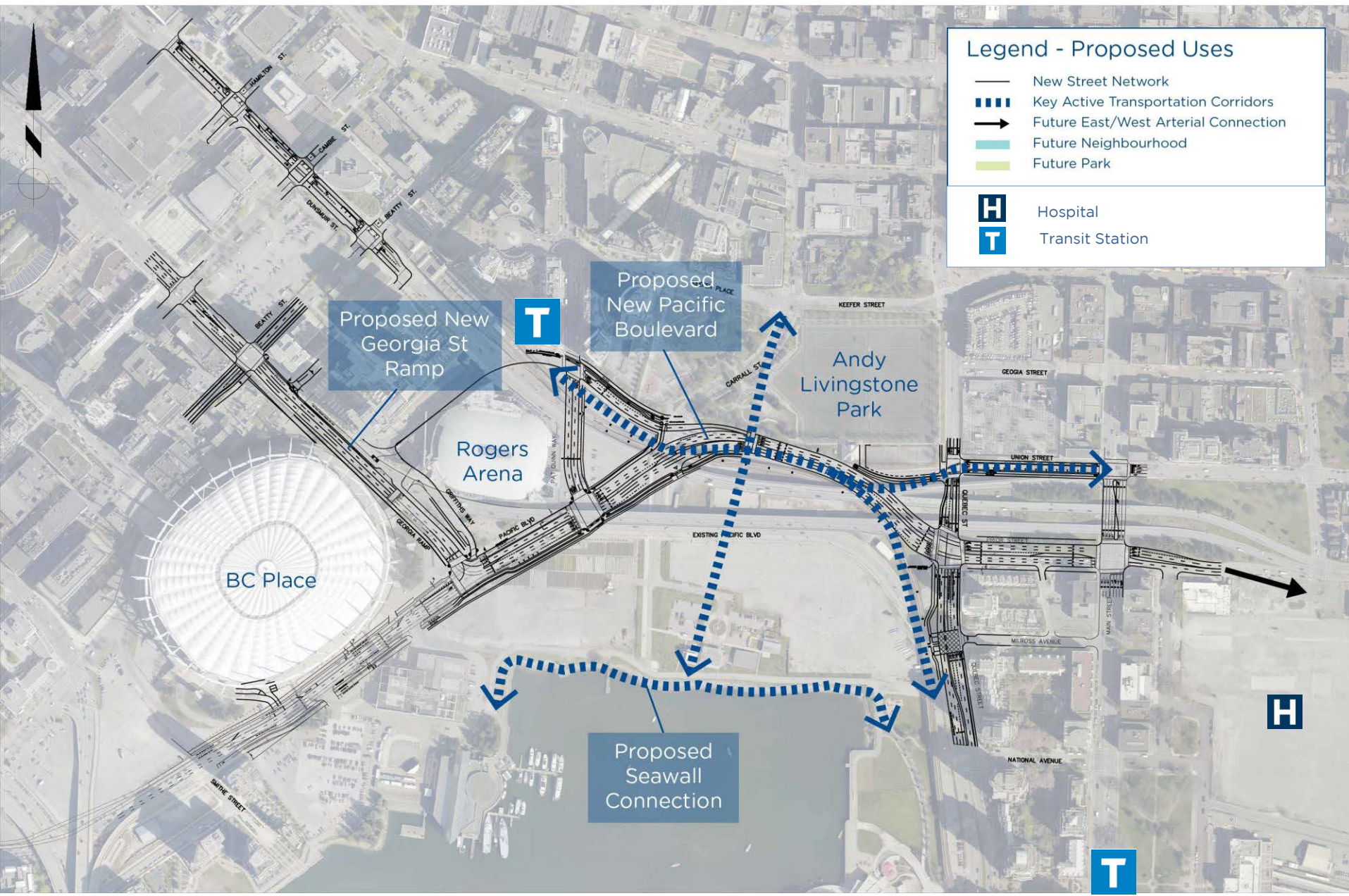
Proposed Street Plan



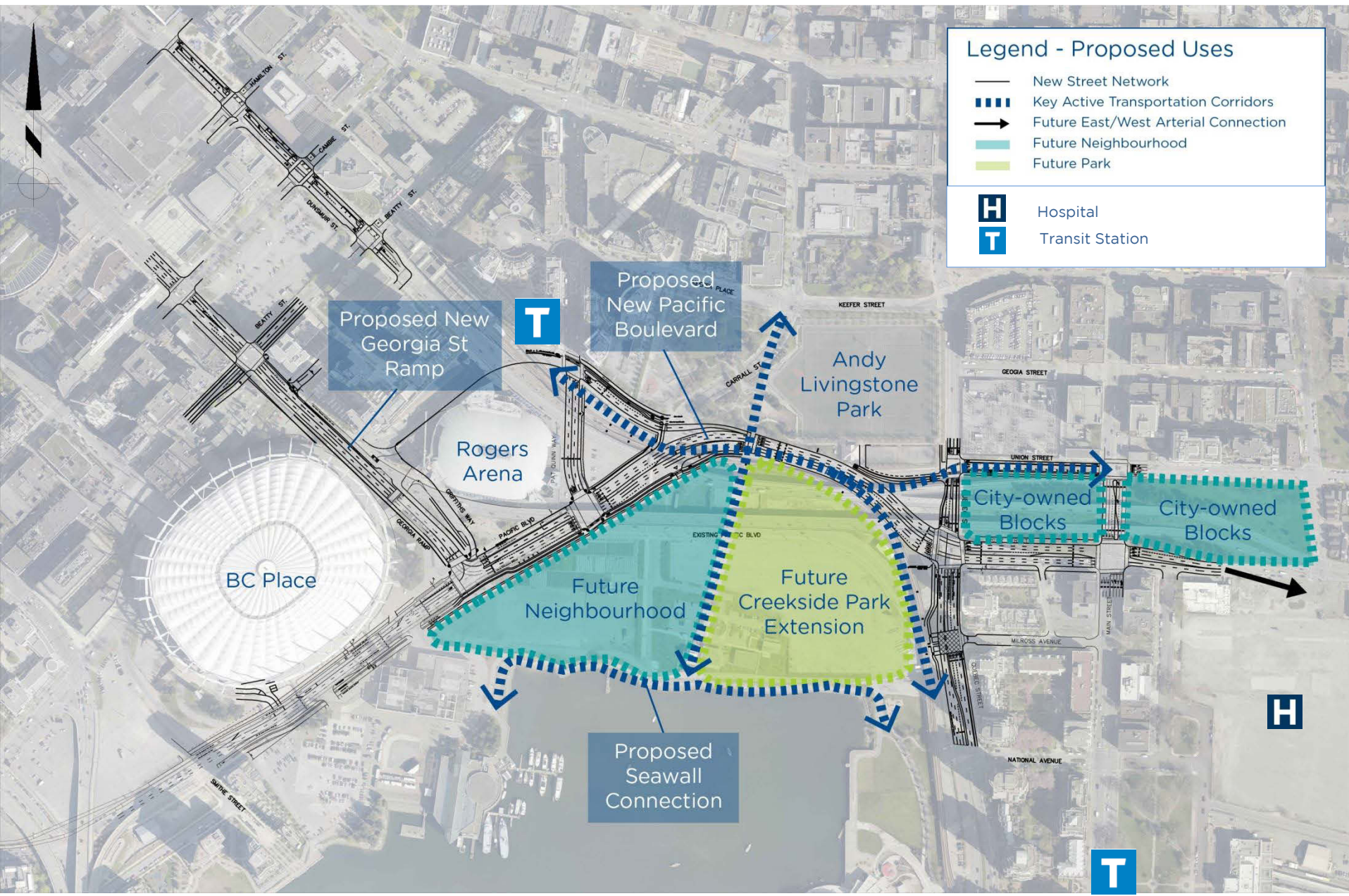
Proposed Street Plan

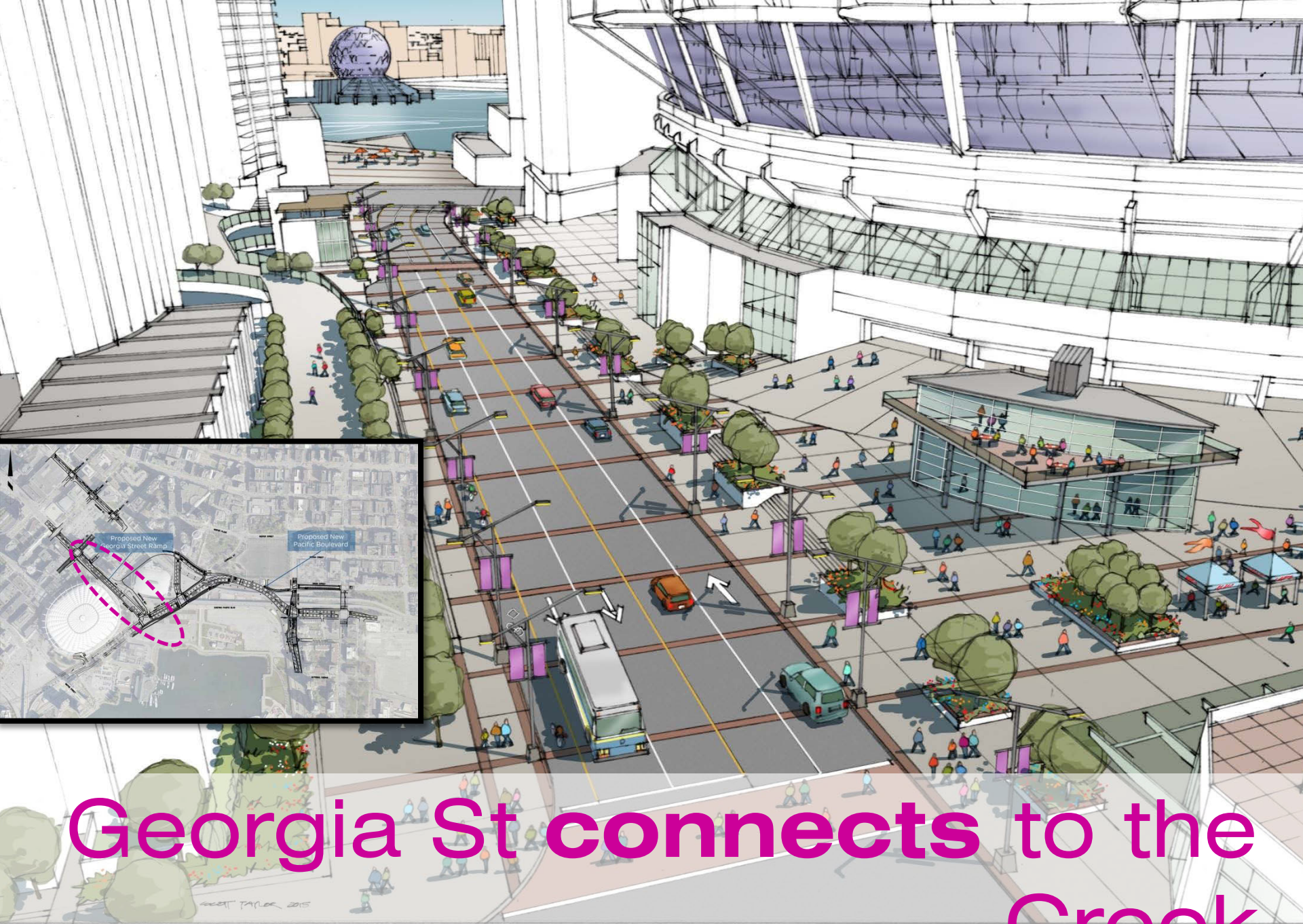


Proposed Street Plan



Proposed Street Plan



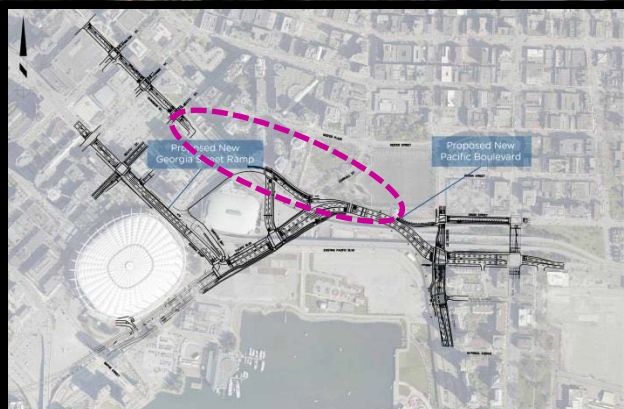


Georgia St connects to the
Creek

Dunsmuir Connection

55%

**re:CONNECT
submissions
proposed some
kind of elevated
public space**



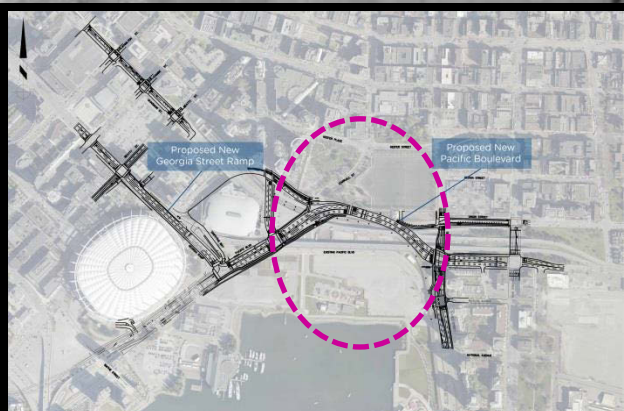
Bigger, better Park

**ANDY
LIVINGSTONE
PARK**

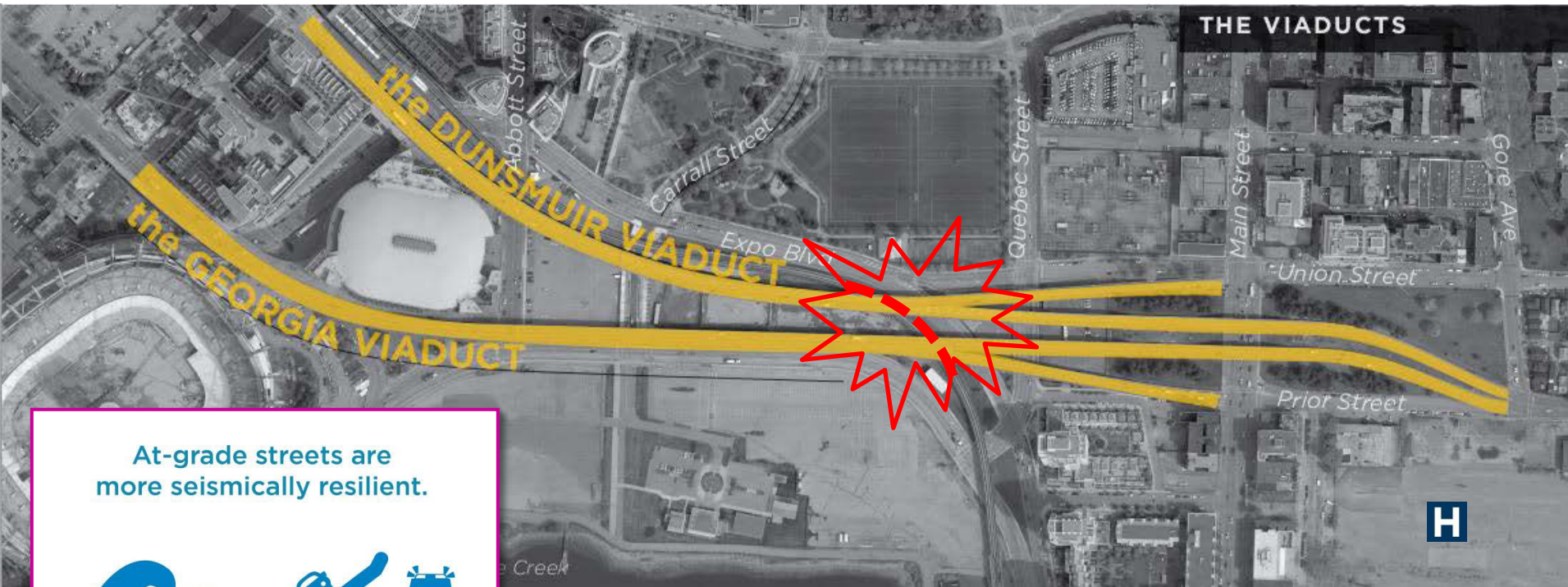
**ADDITIONAL PARK
OPPORTUNITY
+13%**

**FUTURE MIXED USE
& ENTERTAINMENT
DISTRICT**

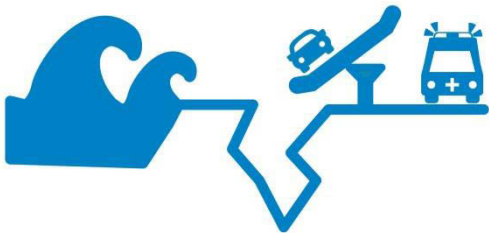
**FUTURE
CREEKSIDE
PARK
EXTENSION**



Improved Safety

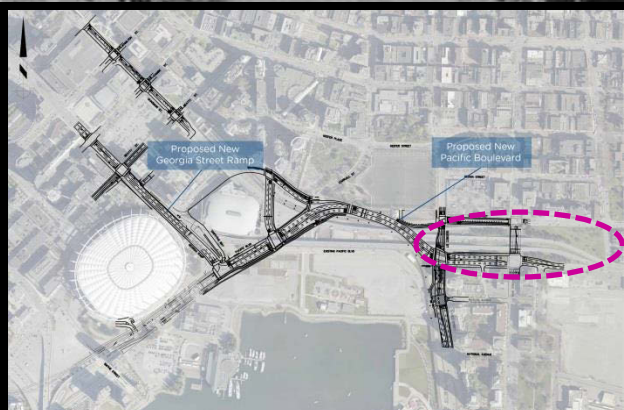
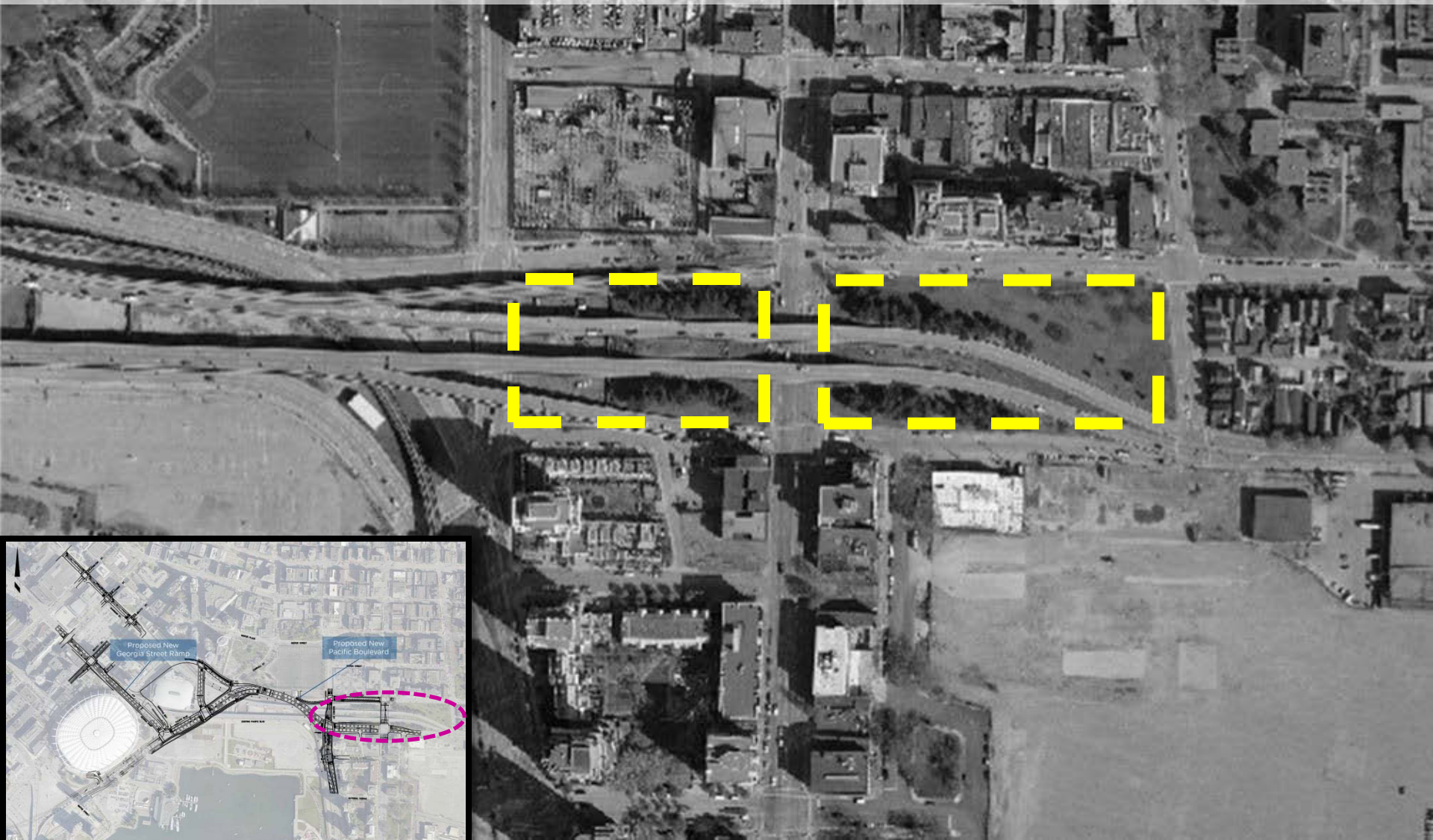


At-grade streets are
more seismically resilient.

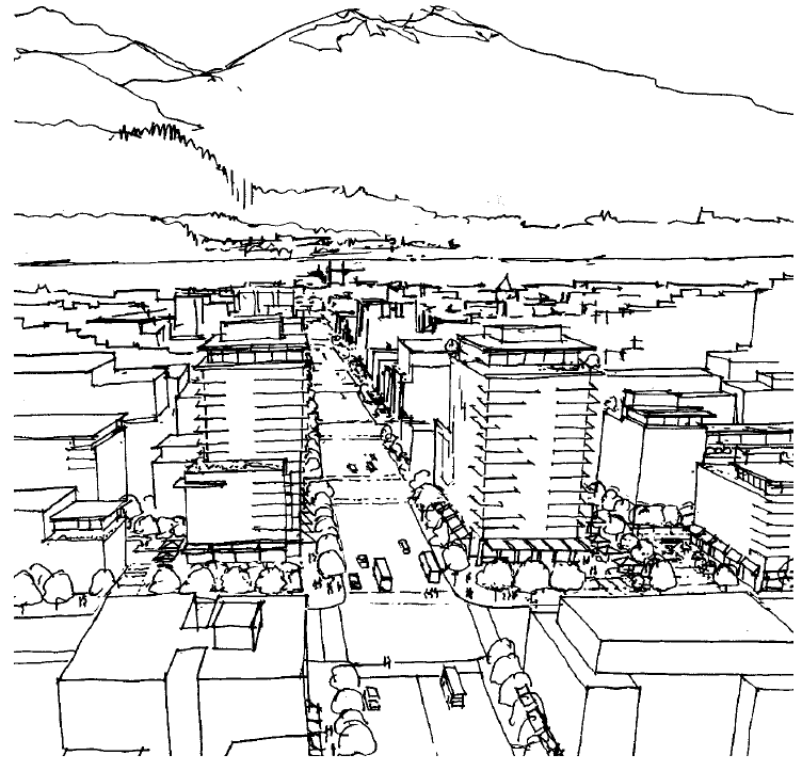
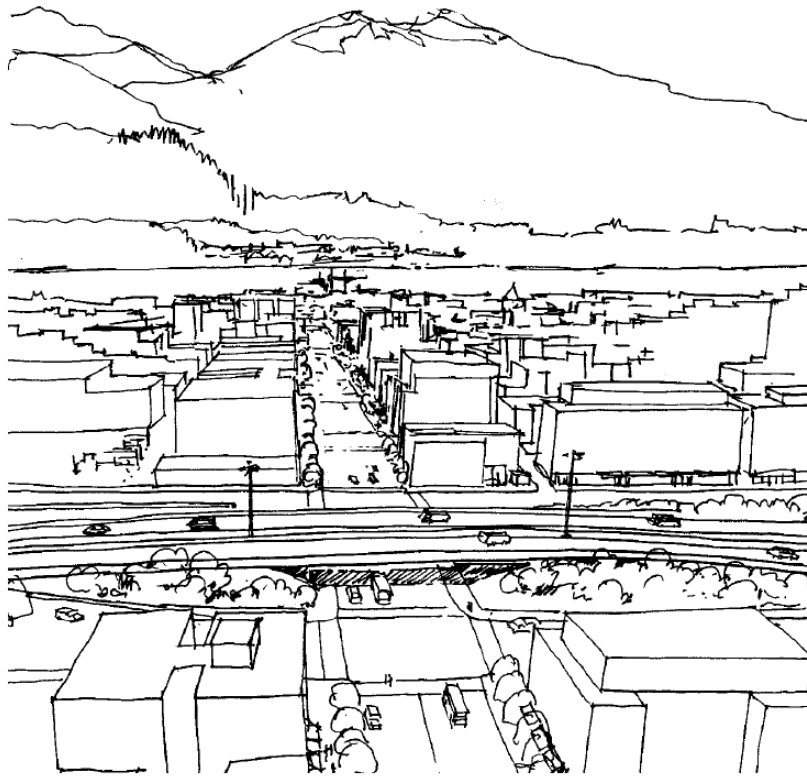


Streets can be raised to new
flood construction levels.

New Local Business and Affordable Housing Opportunities



Restore the Main Street Experience



Public And Stakeholders Reaction To The Plan

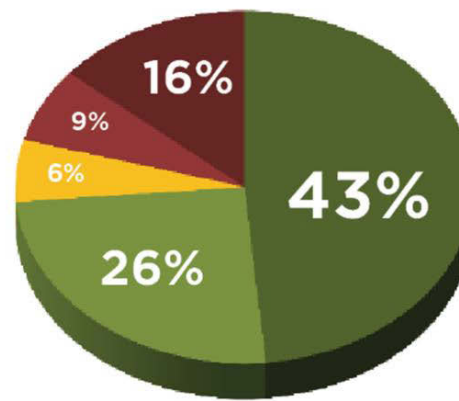
Stakeholder List:

(indicative, not all stakeholders consulted are listed)

Transportation: BC Trucking Association, Translink, Port Metro Vancouver, BC MoT, CoV Fire Ambulance & Police, Active Transportation Policy Council, HUB, Persons with disabilities and seniors committees

Community: SRA, GWAC, FCRA, NEFC JWG, DTES LAPP Committee, Chinatown, Cottonwood Community Gardens, Produce Row

Business: Board of Trade, VEC, Strathcona BIA, Downtown Vancouver BIA, Gastown BIA, Commercial Drive BIA, Tourism Vancouver, NAIOP, CFIB



QUESTION 1:

Do you support the overall concept for this area of the City?

Strongly Supportive	282
Supportive	171
Neutral	40
Opposed	57
Strongly Opposed	108
TOTAL RESPONSES	658

69%

indicated either **support**, or **strong support** for the overall concept.

Work completed since July 2013 (council approval of further study)

Consultancies

- NEFC Transportation Analysis/Modelling
- NEFC Event Management Analysis
- Viaduct demolition study
- Viaduct seismic assessment*
- NEFC Roads/Utilities Conceptual Design
- NEFC Georgia Ramp Conceptual Design
- NEFC Active Bridge Conceptual Design
- NEFC Environmental Overview Assessment
- Prior/Venables In Service Road Safety Review
- Prior/Venables Livability Assessment (ongoing)
- Burrard Inlet Rail Line Arterial Grade Separation Review (Malkin feasibility study - ongoing)

Stakeholder engagement

- PavCo development and operations reps (BC Place)
- Aquilini development and operations reps (Rogers Arena)
- Costco operations reps
- Concord Transportation reps

Concerns And Study Results

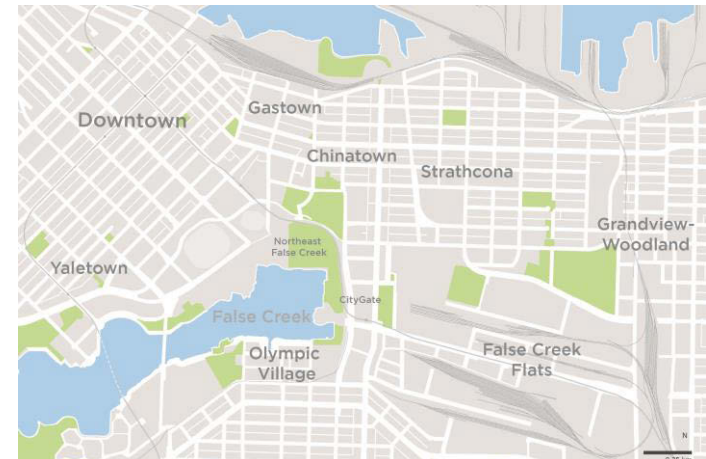
Difficulty accessing downtown for people and goods, travel time delays

- New bi-directional Georgia Ramp, provides 4 vehicular lanes to access downtown from NEFC (compared to 5 on the Georgia and Dunsmuir viaducts today).
- Designed for full size trucks and transit buses.
- Marginal travel time increase (1-3 mins during AM & PM peak periods depending on route).



Permanent diversion of traffic to neighbouring communities

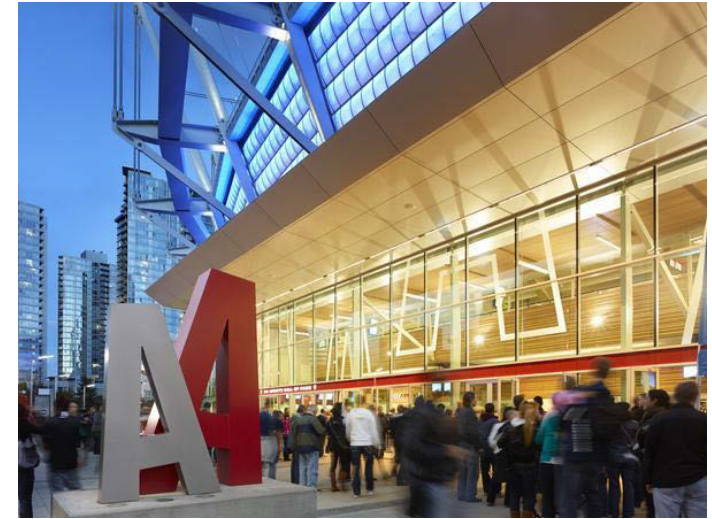
- No net increase in vehicle volumes expected in neighboring communities
- Capacity for today's vehicular demand
- Better performance for future vehicular demand



Concerns And Study Results

Disruption to existing business operations and events at the two stadia

- The replacement street network has been designed to accommodate all required truck sizes and movements.
- Draft event management traffic plans have been developed to ensure equivalent available curb side uses and truck staging areas.



Length of construction and associated traffic impacts

- Construction is expected to take 2 years.
- Traffic impacts can be minimized by converting Dunsmuir viaduct to two-way operation while the new Georgia Ramp is constructed.
- There is sufficient staging areas and suitable construction methodologies to ensure Pacific/Expo can remain open and full truck access provided to the stadia and local business operations during construction



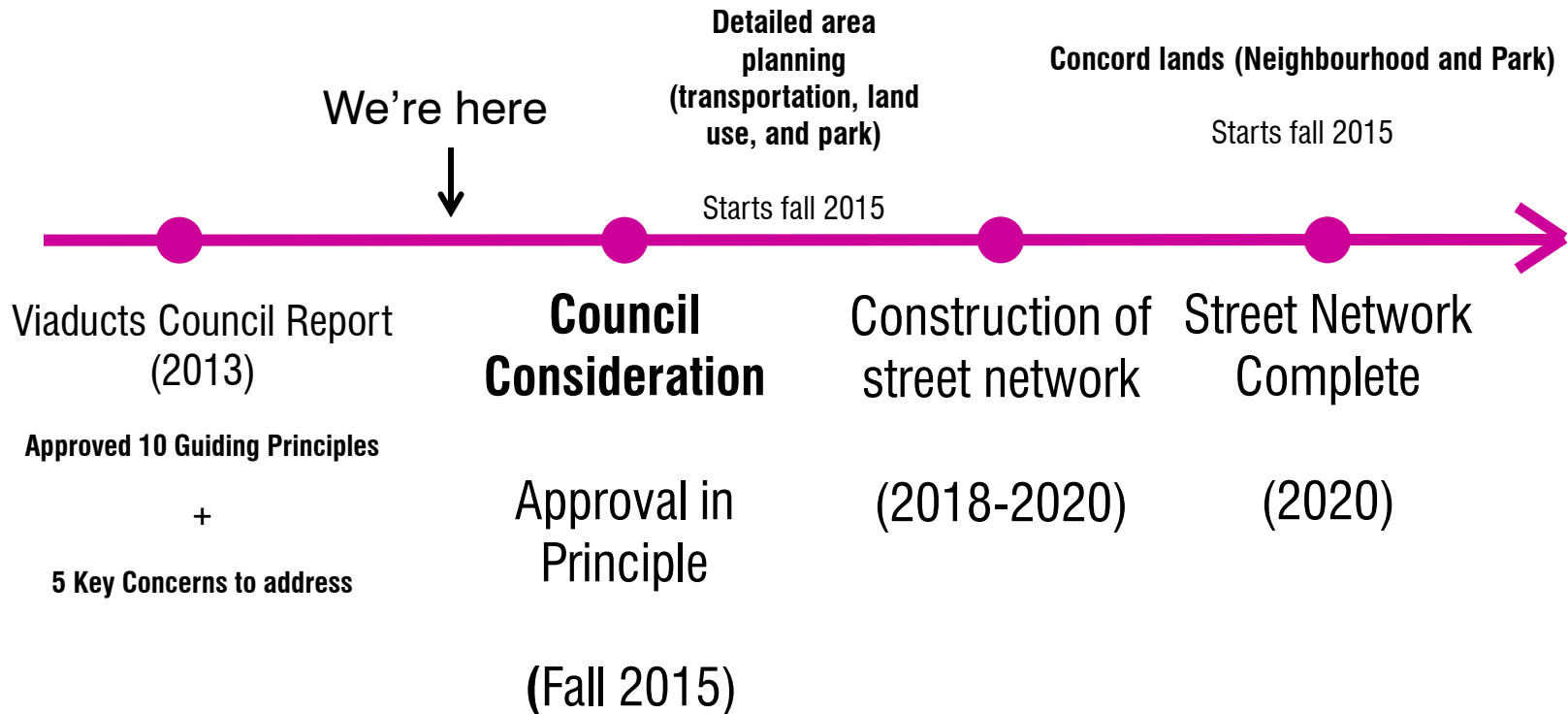
Concerns And Study Results

Ongoing dependence of Prior/Venables corridor as an arterial connection

- Historic 20% decline in vehicular traffic since 2000
- Anticipate further reduction in vehicle volumes and speeds with replacement network
- CoV has implemented a number of safety improvements since 2012, including:
 - increasing pedestrian walk times at key intersections,
 - new traffic signal displays
 - installation of countdown timers
- An independent review of the type and frequency of collisions along the corridor concluded that there is nothing inherent in the engineering design or operation of the street that would be considered a safety concern that requires immediate rectification
- Staff continue to monitor the corridor along with the rest of the city street network, and will implement improvements on a city-wide priority basis
- Any capacity reduction measures in the absence of a new arterial connection e.g. Malkin, would be counterproductive with the risk of increased conflicts on other streets (e.g. Hastings Street or Union Street)
- Analysis of replacement arterial options for Prior/Venables is ongoing



Process



THANK YOU!

vancouver.ca/viaducts

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