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
VANCOUVER'S VIADUCTS
THE PAST

1971
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
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

Downtown

BC Place
Expo Boulevard
Pacific Boulevard
False Creek

Rogers Arena
Dunsmuir Viaduct
Georgia Viaduct

Abbott St
Keefer St
Pender St

Hospital
Transit Station
Proposed Street Plan

Legend - Proposed Uses
- New Street Network
- Key Active Transportation Corridors
- Future East/West Arterial Connection
- Future Neighbourhood
- Future Park

- Hospital
- Transit Station

Proposed New Georgia St Ramp
Proposed New Pacific Boulevard
Rogers Arena
Andy Livingstone Park
BC Place
Georgia St connects to the Creek
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 CREEKSIDES 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?

<table>
<thead>
<tr>
<th>Strongly Supportive</th>
<th>Supportive</th>
<th>Neutral</th>
<th>Opposed</th>
<th>Strongly Opposed</th>
<th>TOTAL RESPONSES</th>
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<td>171</td>
<td>40</td>
<td>57</td>
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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

- Approved 10 Guiding Principles
- 5 Key Concerns to address

Council Consideration
- Approval in Principle (Fall 2015)

Detailed area planning (transportation, land use, and park)
- Starts fall 2015

Construction of street network (2018-2020)

Concord lands (Neighbourhood and Park)
- Starts fall 2015

Street Network Complete (2020)
THANK YOU!

vancouver.ca/viaducts

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