



BROADWAY ACTIVE TRANSPORTATION LANES

Council Presentation

March 29, 2023



JUNE 2022 COUNCIL MOTION

- Broadway Plan approved in June 2022
- Council amendment to build AAA active transportation lanes on Broadway

K. THAT Council commit to a future for the street of Broadway that increases safety and livability for families, seniors, and people with disabilities, and do so by reallocating surface road space to prioritize pedestrians, buses, access for people with disabilities, safe active transportation and micro-mobility, emergency vehicles, public space, and the movement of goods, and deprioritizing personal private vehicles;

FURTHER THAT Council commit to building an AAA safe active transportation lane along Broadway;

AND FURTHER THAT Council direct staff to review, analyze, and report back on recommended designs and funding sources for meeting the above goals.

ENHANCE BROADWAY AS A GREAT STREET

The Broadway Plan
includes a Guiding Principle to
“Enhance Broadway as a Great Street”

Four primary elements:

- Safety – physical protection & cultural safety for all users
- Comfort – physical experience and ease
- Legibility – easy navigation
- Enjoyment – delightful experience



POTENTIAL BENEFITS OF ACTIVE LANES

- More equitable access to local shops & destinations for people without a car
- Accelerate sustainable mode shift by improving transportation choices and deprioritizing general car traffic
- Safe, comfortable cycling & e-scooter use for deliveries, local access & transit integration
- Reduce sidewalk conflicts by providing safe places for people to roll
- Potential for reducing noise and air pollution for pedestrians, residents and businesses



PRECEDENTS



Esplanade, City of North Vancouver

Ceintuurban, Amsterdam

STATION BLOCKS

7 station blocks on Broadway reconstructed through Broadway Subway project



STATION BLOCKS VS NON-STATION BLOCKS

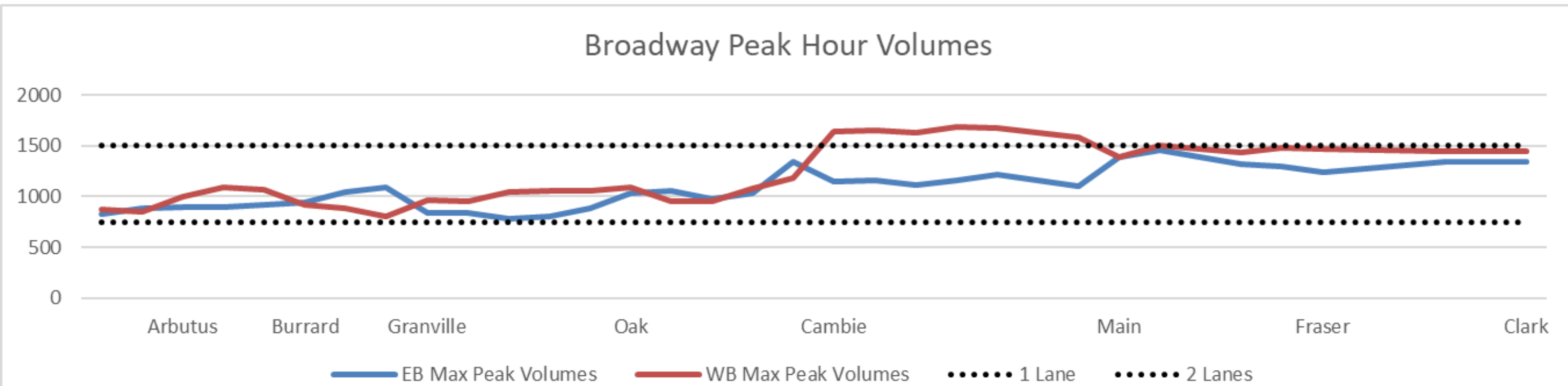
More constraints for station blocks

- Design constraints
Vents, utility locations, etc.
- Turn demands
station blocks at major arterial intersections
- Major bus stops
significant boarding and alighting



EXISTING MOTOR VEHICLE VOLUMES

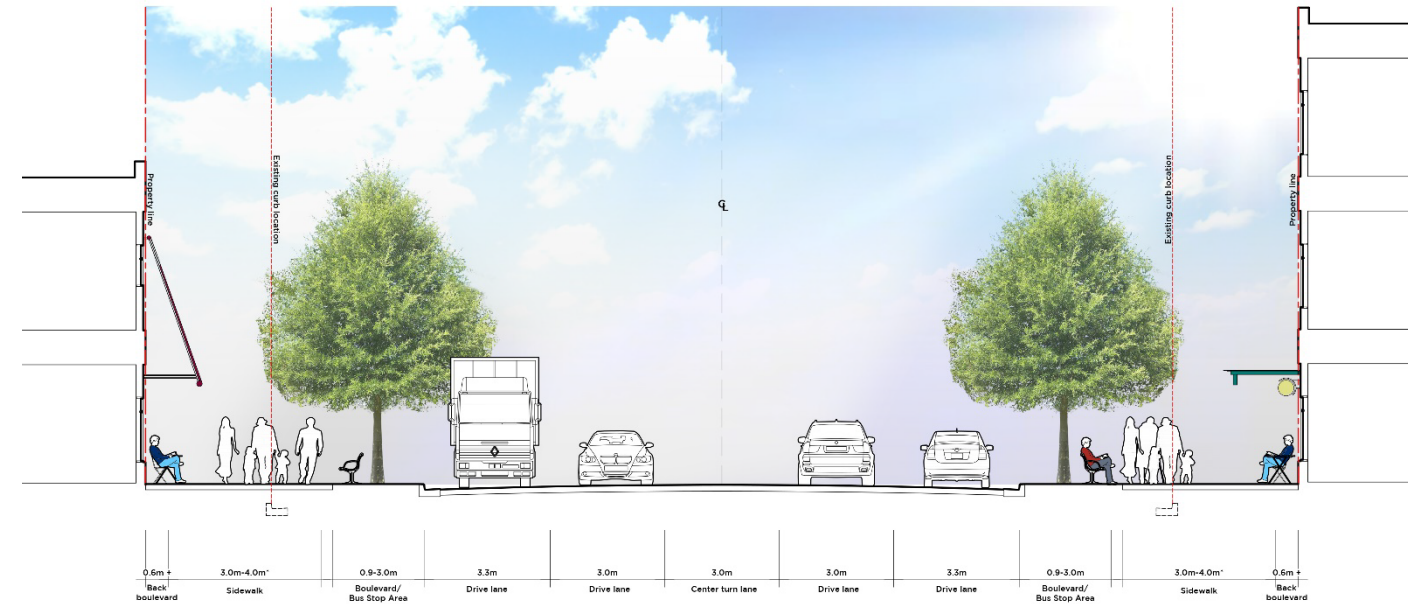
- Broadway Subway will reduce vehicle volumes by at least 15%
Further reduction possible by improving sustainable transportation choices & deprioritizing private vehicles
- Lower vehicle volumes west of Cambie Street
Opportunities to reallocate space vary depending on traffic conditions & local context
- Experience during construction suggests traffic network still functional
Lane capacity reduced to 4 lanes in Feb 2023 and transit priority measures implemented



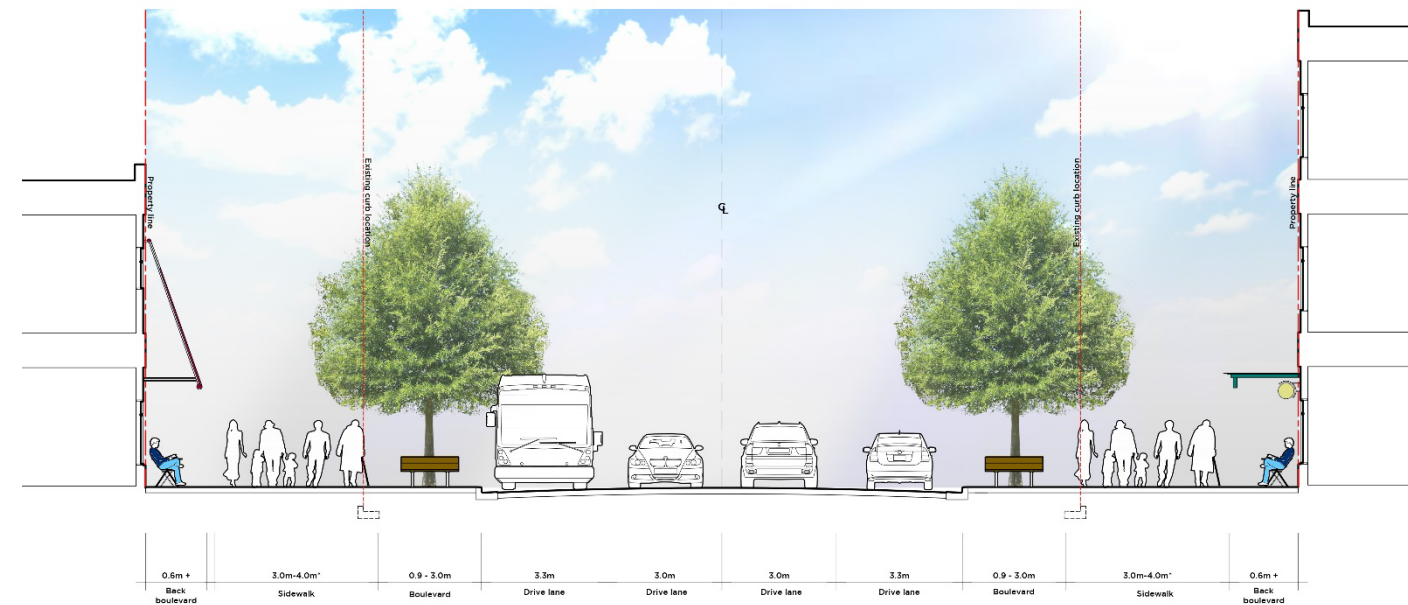
OPTION 1

- Similar to Broadway Plan recommendation
- Future road space reallocation opportunity for Active Transportation Lanes
- Retains parking and loading in short term & where needed long-term
- Allows for widened pedestrian space and patios, seating, etc.
- Requires minimal change at Station Blocks
- Broadway Plan and short-term AT implementation plan identify 10th Ave. and other parallel routes for improvements

Broadway Intersection Option 1



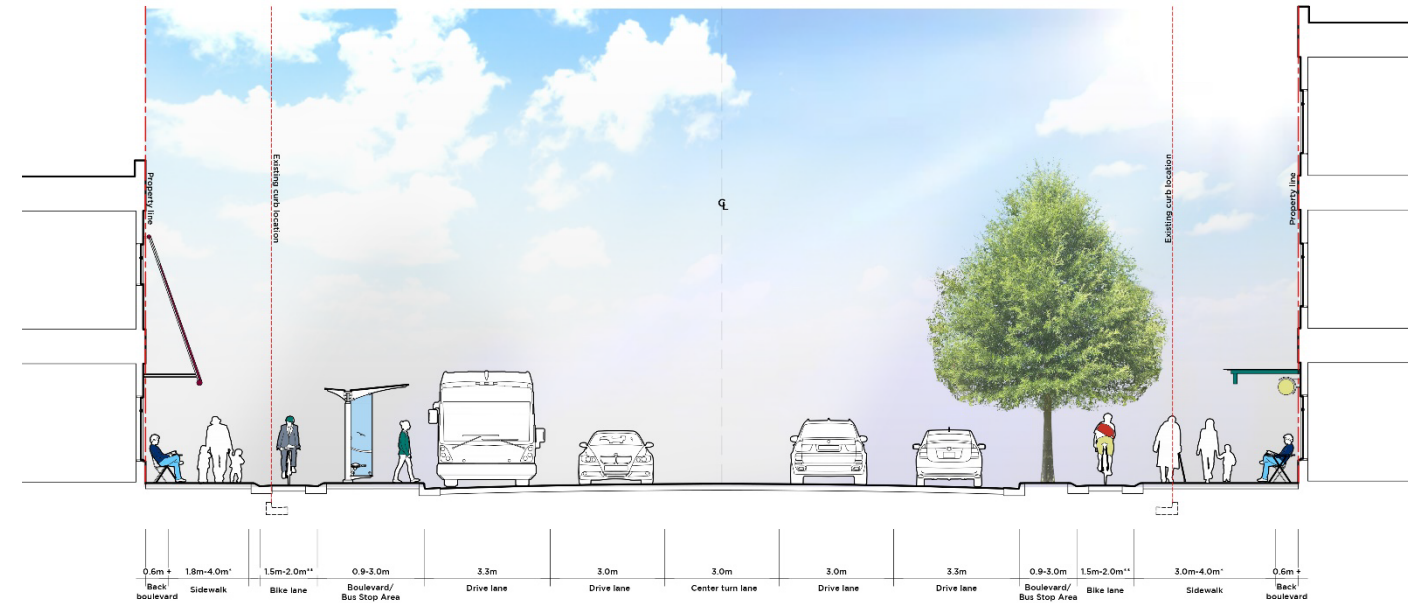
Broadway Mid-Block Option 1



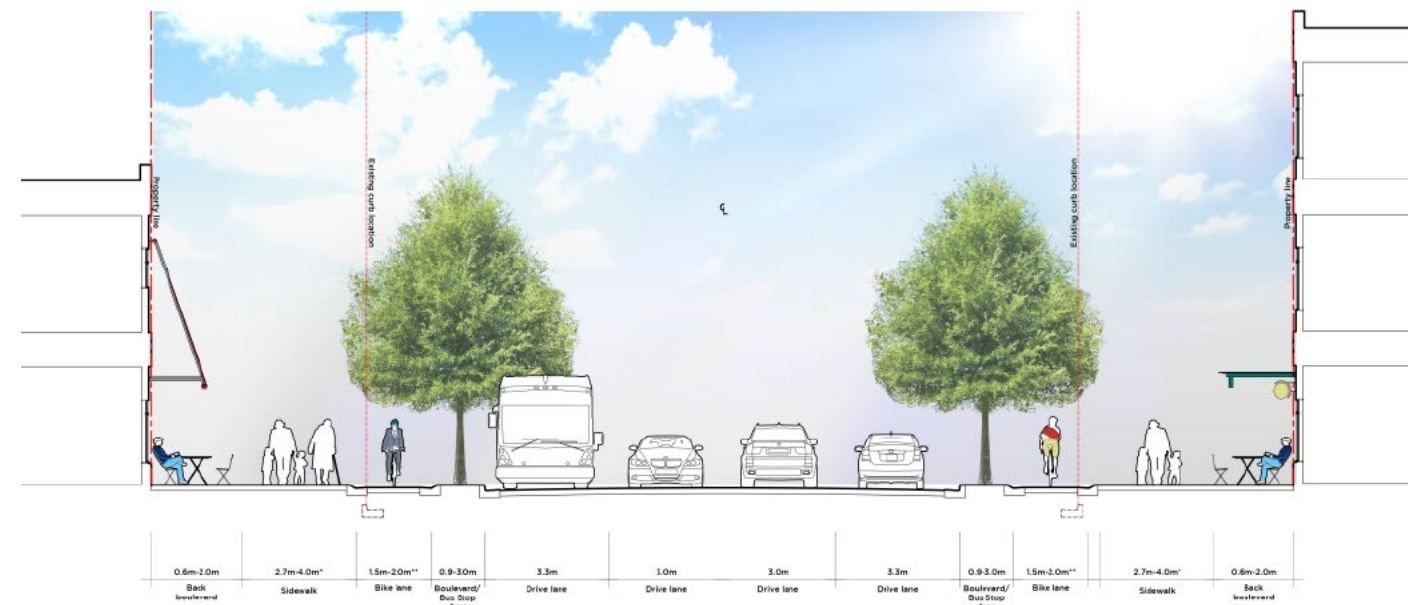
OPTION 2

- Reallocates curb lanes to active transportation lanes
- Little increase in space for pedestrians, patios and seating
- Limits parking and loading
- Requires change to design of station blocks
- Only feasible solution for AT lanes in station blocks
- Requires development setbacks identified in Broadway Plan

Broadway Intersection Option 2



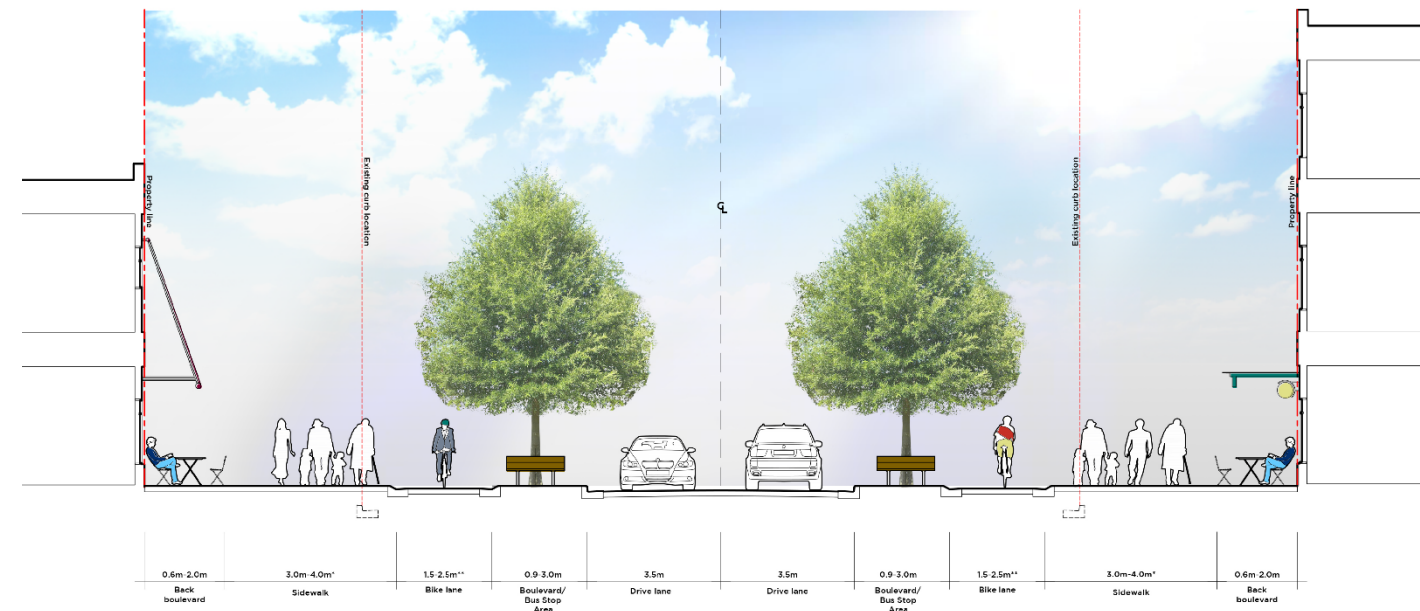
Broadway Mid-Block Option 2



OPTION 3

- Reallocate curb and additional travel lane to wider sidewalks, public space and AT lanes
- Leaves single travel lane in each direction
- Similar to Option 1 for pedestrian space and patios, seating etc.
- Requires design change at station blocks
- Significantly reduces motor vehicle capacity
 - impacts transit, good movement, emergency vehicles, etc.
 - requires TransLink approval
- Limited parking, loading, pick-up, and drop-off

Broadway Mid-Block Option 3



REPORT RECOMMENDATION

A. THAT staff advance a design for Option 1, as generally described in this report, while preserving for the addition of active transportation lanes in the future and report back to Council on the design as part of the Broadway Corridor Streetscape Plan.

RECOMMENDATION DETAILS

■ TRAFFIC AND TRANSPORTATION IMPACTS

- Impacts of further road reallocation better understood after Broadway Subway is operational

■ STATION BLOCKS & DELIVERY

- Designs (almost) complete
- Financial/ implementation risk

■ BUDGET

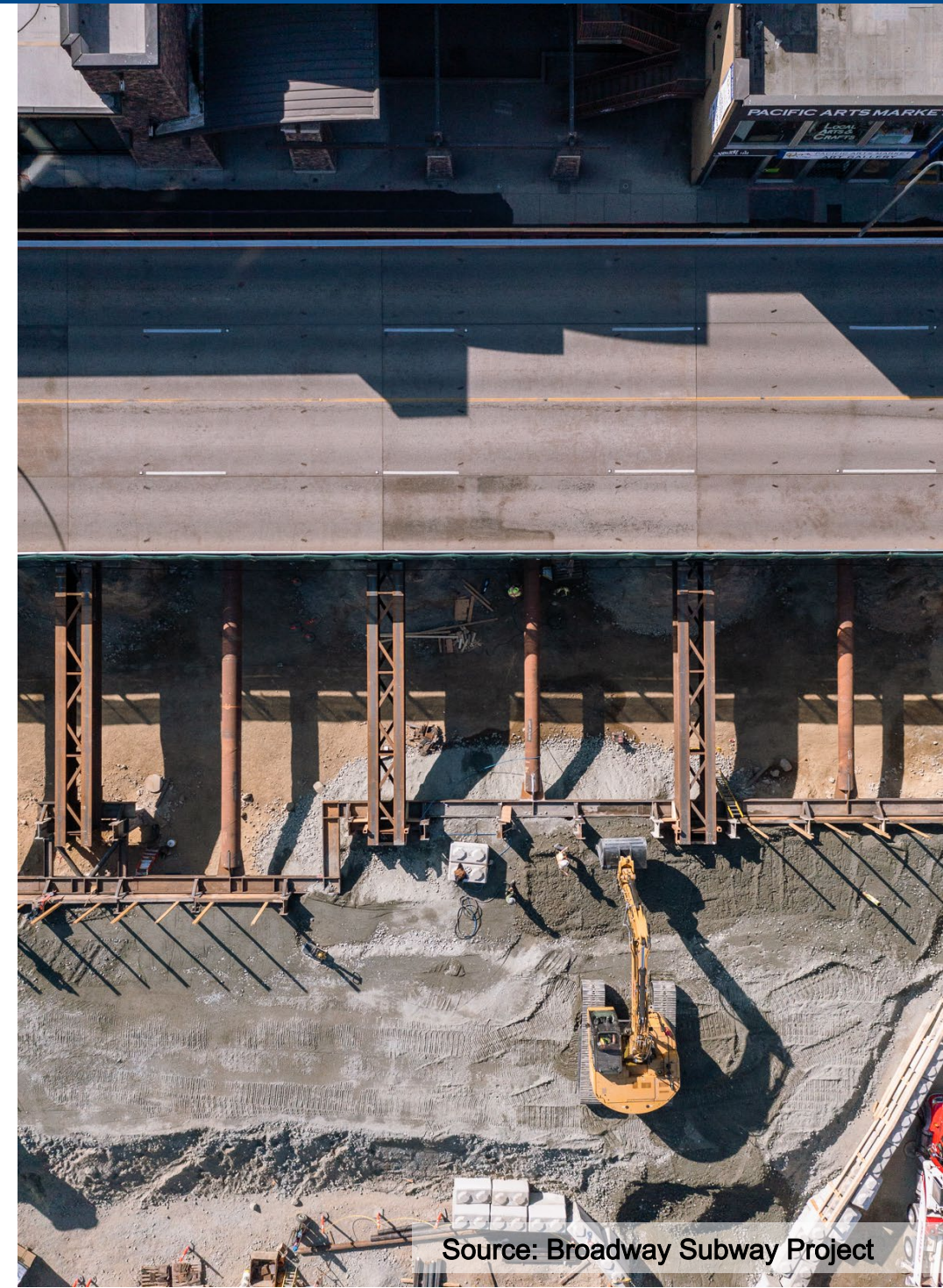
- No current budget
- Reallocating capital to Broadway would impact plans to deliver active transportation corridors such as: Portside Greenway, Kent Ave, Eastside Crosscut, Robson Pedestrian Improvements, Granville Street, etc.
- Active Transportation Corridors allocated \$38 million in 4-year Capital Plan.

■ REGIONAL APPROVALS

- Changes to MRN and truck routes require TransLink approval

■ TIMING

- Once subway is operational - less risk, easier to assess impacts



Source: Broadway Subway Project

ALTERNATIVES

B. THAT staff advance a design for Option 2, as generally described in this report, and:

- conduct public and stakeholder engagement on those designs,
- work with the Province of BC on a strategy to construct active transportation lanes as part of the road restoration for the Broadway Subway,
- advance interim designs for non-station blocks that can be delivered in tandem with subway completion, and
- report back to Council with a final recommendation in Q4 2023.

C. THAT staff advance designs for Options 2 and 3, as generally described in this report, and:

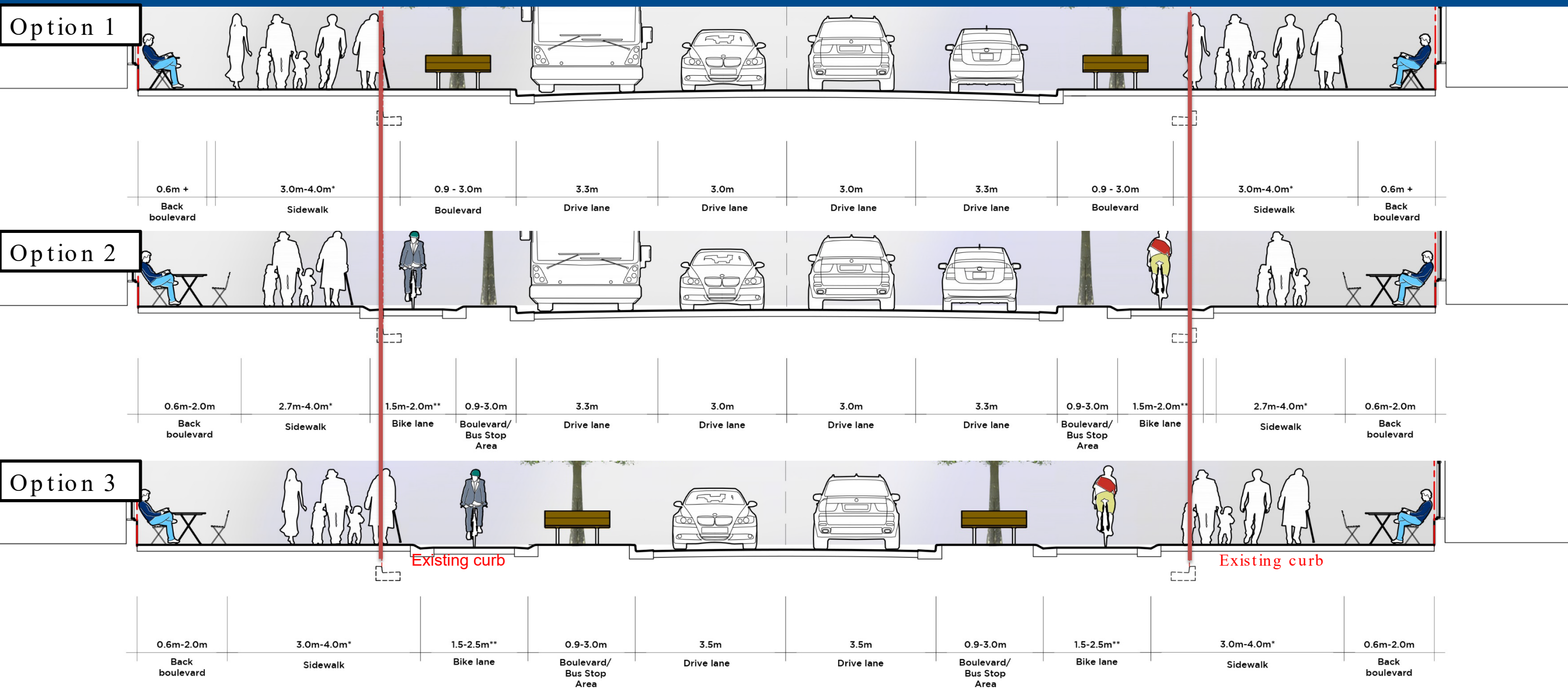
- conduct public and stakeholder engagement on those designs,
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- advance interim designs for non-station blocks that can be delivered in tandem with subway completion, and
- report back to Council with a final recommendation in Q4 2023.

OPTION COMPARISON – STATION BLOCK



*sidewalk widths may vary depending on site specific constraints and conditions
 **bike lane widths may vary depending on site specific constraints and conditions

OPTION COMPARISON - MIDBLOCK



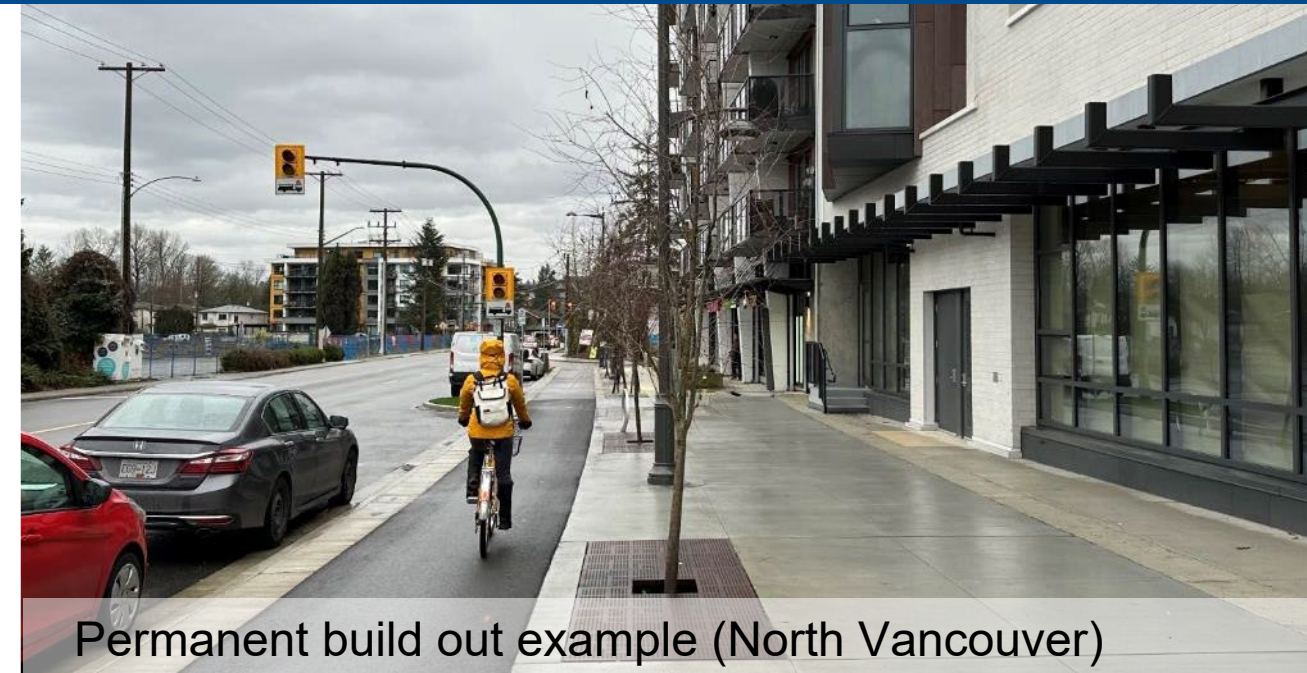
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**bike lane widths may vary depending on site specific constraints and conditions

IMPLEMENTATION CONSIDERATIONS

OPTION 1:

- Station Blocks: Deliver wider sidewalks as part of subway construction – no impact to Broadway Subway
- Non-station Blocks: Reallocate road space with future redevelopment, depending on local context.
- Future Implementation: Preserve for future active transportation lanes.



Permanent build out example (North Vancouver)

OPTION 2/3:

- Station Blocks: Implementation of active transportation lanes requires negotiation with the Province. Financial implications and timing of delivery uncertain.
- Non-station Blocks: Opportunity to deliver interim, low-cost measures until redevelopment occurs. Deliver full build-out with future redevelopment, where possible.



Lower cost example (Smithe Street)

FINANCE – STATION BLOCKS

- Public Benefit Strategy and 2023 - 2026 Capital Plan did not include Broadway active transportation lanes cost
- Option 1 funded as part of Broadway Subway construction
- Active transportation lanes require additional funding
- Cost & feasibility of option 2 unclear

* Estimates are high level and does not include utilities, signals, Green Infrastructure, or the associated costs of the negotiations with the Province

Option	Option 1	Option 2
Incremental Cost (\$M)	Minimal	\$3 M minimum



Permanent build out example (North Vancouver)

FINANCE – NON-STATION BLOCKS

Option	Option 1	Option 2	Option 3	Interim
Incremental Cost (\$M)	Minimal	\$ 10 M+	\$ 20 M+	\$ 2M – 5M

Between station blocks

- Interim design could deliver functional active transportation lanes on an earlier timeline (with impacts, including parking/loading)
- Staff would continue to explore additional funding opportunities

* Estimates are high level and does not include utilities, signals, or Green Infrastructure



Lower cost example (Smithe Street)

NEXT STEPS (OPTION 1)

July 2022 - Q1 2023



- Work with TransLink to shortlist concepts that are technically feasible
- Continue collaboration with Host Nations to incorporate their values, history and art
- Council direction on advancing Streetscape Design Concepts



- Advance preferred Streetscape Design Concepts



- Engage public and stakeholders on Broadway Public Realm Plan



- Refine preferred concept

Q2 2024



- Broadway Public Realm Plan to Council

NEXT STEPS (OPTION 2/3)

July 2022 - Q1 2023



- Work with TransLink to shortlist concepts that are technically feasible
- Continue collaboration with Host Nations to incorporate their values, history and art
- Council direction on advancing Streetscape Design Concepts



- Negotiate with Province on station block changes
- Advance preferred Streetscape Design Concepts
- Engage public and stakeholders on Streetscape Design Concepts for feedback, highlighting trade-offs in the public realm



- Refine preferred concept(s)

Q4 2023



- Broadway Active Transportation Lanes Council Decision

Q2 2024



- Broadway Public Realm Plan to Council