### TUNNEL VISION vs GREEN VISION



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#### TUNNEL VISION

- Vision Vancouver wants to build a 5 km extension to the Millennium Skytrain Line
- The extension would be almost entirely in a tunnel, from VCC-Clark station to Broadway and Arbutus
- This subway project is estimated to cost \$2 Billion, and will probably go over budget
- It would take 5-10 years to build the subway line
- It would take at least another 10 years, and \$3 billion (in 2014 dollars) to extend the subway to UBC



#### GREEN VISION



- An alternative would be to build a modern Light Rail Transit system at ground Level, along the CP Rail right of way and 16<sup>th</sup> Avenue
- This route would utilize the existing streetcar right of way constructed next to Olympic Village, and also recycle the Olympic Line streetcar trackage and electrical system
- This system could be built in 1/3 the time, all the way to UBC, for less than \$500 Million
- It would also include an extension to Science World- Main Street station on the Expo line

#### ROUTE MAPS TUNNEL VISION



**GREEN VISION** 



5 km subway train 7 km express bus One transfer required from Millennium Line to UBC Two transfers required from Expo Line or Canada Line to UBC

13.5 km LRT One transfer required from Millennium Line, Expo Line or Canada Line to UBC

#### TRAVEL SPEED

#### TUNNEL VISION

#### **GREEN VISION**





Skytrain: 40 km/hour Express bus: 20 km/hour Average: 30 km/hour, excluding transfer

LRT: 30 – 35 km/hour

## SYSTEM CONSTRUCTION COSTSTUNNEL VISIONGREEN VISION



\$400 million per km

\$30-40 million per km

#### PASSENGER CAPACITY

#### TUNNEL VISION

#### **GREEN VISION**



400 passengers/train Up to 15,000 passengers/hr/direction



400-500 passengers/train Up to 20,000 passengers/hr/direction

### STATION COSTS TUNNEL VISION





With escalators, elevators, stairways, security systems, emergency exits, fire-suppression systems, and heating, ventilation, air conditioning, each subway station would cost \$25-50 million, in 2014 dollars, roughly the same amount as a typical high school or a medium sized hospital

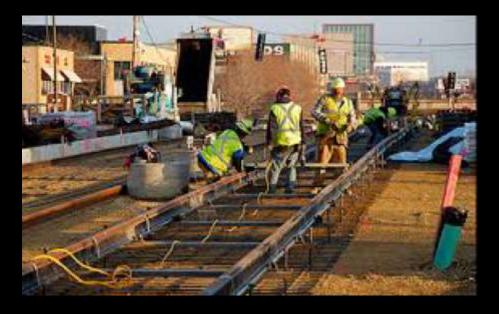


With raised sidewalk platforms and weather protection shelters, each ground level LRT station would cost approximately \$1 million, roughly the same as it costs to build a block of new sidewalk, 2 typical houses, or 4-5 apartments

### CONSTRUCTION TIME FRAME TUNNEL VISION GREEN VISION







Based on the Evergreen Line and Canada Line experiences, this subway extension would take around 10 years to construct Based on experiences in Edmonton, Calgary and Portland, a modern ground level LRT could be completed in 2 to 3 years

# ENVIRONMENTAL FOOTPRINTTUNNEL VISIONGREEN VISION





More concrete used in construction More electricity used in operation Recycles much more existing infrastructure More flexible for extensions, expansions and equipment recycling

#### END OF THE LINE

25 minutes after leaving VCC Clark Station or Science World Main Street Station you could be:

#### TUNNEL VISION

#### **GREEN VISION**



at Broadway & Arbutus Station, Waiting for a bus or

at UBC

Where would you rather be?

contact Adam Fitch adamfitchathome@gmail.com