WIDENING THE HEALTH LENS IN THE ENVIRONMENTAL ASSESSMENT PROCESS
LESSONS LEARNED IN THE GEORGE MASSEY TUNNEL REPLACEMENT PROJECT

April 20, 2017
Laura Chow | Environmental Health Officer, Built Environment Team, VCH
LOCATION OF THE PROJECT
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CURRENT CONDITIONS

- 80,000 vehicles per day
- Connects to YVR, US border crossings, Tsawwassen ferry terminal, Deltaport, Boundary Bay Airport
- Vital goods movement route
• Proponent: Ministry of Transportation & Infrastructure
• Project:
  • Replacement of 4 lane tunnel
  • On & off-ramp replacement
  • Tunnel decommissioning
MoTI PROJECT OVERVIEW

6 KEY ELEMENTS:

1) Environmental Enhancement & Restoration
2) Commitment to World Class Transit
3) Improved Safety & Resilience
4) Improved Traffic Movement
5) Efficient Movement of Goods & Services
6) Numbers (e.g. jobs, size)
WHY HEALTH?
PLANNING OF ROUTE
Decision to build a 10-lane bridge

URBAN PATTERNS
Connectivity between communities

TRAVEL CHOICES & BEHAVIOURS
Amount & type of active transportation used

POPULATION HEALTH IMPACTS
Physical fitness, traffic safety, pollution exposure, community cohesion & access to facilities
WHAT HEALTH IMPACTS?

- Traditionally, EAs consider **noise & air quality** as the main factors of concern with respect to health.
A BUILT ENVIRONMENT PERSPECTIVE

Built Environment: All human made or altered physical structures & surroundings in the areas that we live, learn, work, & play

Health: a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity
Jan-Feb 2016: dAIR Review

Mar 2016: Response comments to dAIR
Draft HIA template & scoping

May-Jun 2016: Review of AIR / Screening

Jul-Oct 2016: Application Review

Nov-Dec 2016: Referral Materials Review

OUR ENGAGEMENT & PARTICIPATION
DRAFT APPLICATION INFORMATION REQUIREMENTS (dAIR)

- Health to be considered
- Air Quality – recommend extension of local assessment area (LAA)
- Economic conditions
- Built Environment
- Transportation
- Traffic – recommend identifying mode share goal
• Criteria were health-related
• LAA is sufficient as net predicted AQ concentrations do not change
• Project may help decrease GHGs
• Economic conditions are positive
• Recommendations:
  • Provide clear purpose statement
  • Mimic boundaries as defined by TransLink
  • Include health impacts of road pricing options
  • Include public transportation as part of active transportation
  • Use 2031 as a temporal boundary
**SCREENING**

- Revision of the Application Information Requirements (AIR)
- Limited heavily by the commenting method
APPLICATION REVIEW

• Comments on our HIA involvement, transportation & equity conclusions
• Letter recommending:
  • Secured public transportation funding
  • Equitable, regional-based road & bridge pricing system
  • Design aligns with TransLink’s mode share goals
Where are VCH’s concerns addressed?
- Air quality
- Oak St Bridge queue lengths & local traffic patterns in Richmond
- Modal shift
HEALTH STRUGGLES
The significant problems we have cannot be solved at the same level of thinking with which we created them.

Albert Einstein
• HIA completed
• Part of the Inter-Agency Working Group
• MoTI & EAO receptive to our involvement
### HOPE FOR THE FUTURE

#### CRITERIA

- **Efficient transportation for all users**
  - Traffic congestion
  - Transit capability
  - Travel time reliability
  - Pedestrian and cycling accessibility

- **Safety**
  - Incident response capability
  - Earthquake protection
  - Traffic safety

- **Agriculture**
  - Minimize agricultural land impacts
  - Access to/from agricultural areas

#### EVALUATION

- **Environment**
  - Local and regional air quality
  - Wildlife and terrestrial habitat
  - Marine life and habitat

- **Jobs and the economy**
  - Access to gateways and trade corridors
  - Access to business and industrial land
  - Marine access for goods movement

- **Social and community considerations**
  - Community access, including across the highway within communities
  - Private property impacts
  - Noise impacts
  - Visual impacts
CURRENT STATUS

APPROVED
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<th>Role</th>
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<td>DR. MEENA DAWAR</td>
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<td>DR. JAMES LU</td>
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<td>Medical Resident</td>
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<td>DR. RAKEL KLING</td>
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<td>Senior Environmental Health Officers</td>
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<td>JESSICA BOON</td>
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<tr>
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QUESTIONS?

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