



Institute for  
**HEART+LUNG Health**  
Strong beats. Clear breaths. Full lives.

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I am a tenured and endowed professor at UBC. Some of my specific qualifications can be found under my signature at the end of this letter. I have dedicated my professional life to health concerns related to traffic-related air pollution, and I have over 100 related publications. It is an utmost priority for me to translate the knowledge gained by my research, and that of my community of scholars, to concrete action that benefits the citizenry of British Columbia.

I am now aware of such an opportunity, to take what we have learned, through taxpayer-funded research and painstaking research effort, and apply it to the following scenario:

I have recently learned about the planned new interchange at 216<sup>th</sup> in Langley, on the north side of Highway 1.

Here are my concerns about this project, as I understand it:

- It will increase traffic overall (estimated increase from 3,400 vehicles to 22,000 vehicles), and increase truck traffic specifically.
- Increased traffic due to the changed infrastructure will increase air pollution exposure to children at Ecole des Voyageurs and Topham Elementary.
- It is well-established that at least 200 meter (better 300 meter) buffer zone away from traffic is needed to protect against significant exposure. There will not be a sufficient buffer zone for the members of the residential community, including vulnerable school-children, surrounding this new infrastructure.
- Some have apparently cited noise walls as offering protection, and yet there is no evidence that a noise wall will block pollution moving from the roadway to the residential and school areas.
- **The increased exposures can be predicted to infer a significantly increased risk of new asthma, allergy, low birth weight babies, heart disease and other substantial health concerns including worsening of pre-existing disease in nearby residents.**

Assuming that accuracy of the data provided to me, each of these concerns is backed up by rigorous peer-reviewed and published scientific research performed by my team and others.

**As a result of the concerns noted above, please re-consider the project in light of the risk to human health that can be anticipated based on the proposed changes.**

I am happy to elaborate further should you have any doubt as to the seriousness of my concerns, reflecting real threat to your community due to the proposed new highway exchange.

Sincerely,



Chris Carlsten, MD MPH FRCPC ABIM

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