Response to Environmental Assessment Certificate Application for: Port Mann/Highway 1 (PMH1)

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1 Introduction

We believe that the Gateway Project, and specifically the Port Mann/Highway 1 expansion, should

- clearly state its goals in a measurable form, so that these goals may be objectively assessed;
- rationalize its objectives with the land use and transportation planning objectives of the region: those of the GVRD and the GVTA.
- diligently assess an integrated, feasible alternate strategy which is centred on best practice and worldwide experience rather than roadway expansion
- diligently evaluate the use of tolls primarily as a support for transportation demand management
- commit to clearly and publicly stating the division between the objective of maximizing profit from the collection of tolls, and the objective of transportation demand management
- commit to making decisions on toll increases through a transparent process open to meaningful public input.

As long as the objectives regarding tolling remain confounded and the overall program objectives remain unmeasurable, social impacts as well as economic and transportation outcomes are likely to be an unnecessary, unwelcome surprise.

With this in mind we believe that the issues below make the current Environmental Assessment certificate application unacceptable. Above all, the applicant has not fairly considered the dominant long term impacts of its proposal, nor fairly assessed major available alternatives to achieve its stated goals. Without more specific targets, the public and environmental review process will be subject to obfuscation and poor science.

2 The project's stated goals do not have measurable objectives

Of utmost and fundamental importance to the Environmental Assessment of this project is to ensure that the objectives are clear.

A series of international OECD meetings and studies (see *OECD* (2002)) was conducted between 1996 and 2000 to assess the range of best-practice policy instruments and strategic methods for long-term urban transport planning for the period 2000–2031. Some overarching conclusions of the OECD were as follows:

 Planning must be based on the use of explicit, measurable targets and backcasting (discussed below) rather than the antiquated paradigm of "predict and provide"

- The set of chosen policy instruments must be comprehensively planned and phased over time in order to build public will and remain politically feasible
- The highest priority and focus in the long term must be to change public attitudes

It is critical that the Environmental Assessment be based on objectives which are

- specific,
- · measurable, and
- time-bound,

as well as important to current and future British Columbians. That is, the PMH1 project must be both justified and optimised based on targets whose success could later be objectively measured on a planned target date. Only in this way can public input be said legitimately to have a chance to

- evaluate the rationale,
- help to determine the best policy for the stated objectives.

So far the project lacks any mechanism for accountability of its proponents, nor has public input been encouraged on either of the fundamentals above. Without the context of explicit targets, there is no way realistically to assess the social and environmental benefits and costs.

The objectives of the PMH1 project, as stated in section 1.2.2 of the submission, are to

- Reduce travel times on Highway 1 and increase their predictability;
- Reduce congestion at entry and exit points to Highway 1;
- Reduce travel times for trips across Highway 1 and improve connections within and between communities;
- Improve access to and from the corridor for goods movement;
- Facilitate the introduction of transit service along the corridor and the improvement of transit service across the highway;
- Expand HOV, cycling and pedestrian networks along or in the vicinity of the corridor; and,
- Improve safety for vehicle operators and passengers, cyclists, and pedestrians.

These goals do not have measurable objectives. We believe that the Application must include baseline information and measurable targets concerning project objectives, for instance target travel times in a given future year, a tangible measure of safety, and so on. The plan for the project must ultimately state what methodologies are planned to ensure that the design requirements will meet the objectives.

Once objectives are laid out, the project should be rationalised using the modern paradigm of "backcasting" from a future, specific planning objective to a policy or sequence of policy interventions and possible milestones extending back to the present. This approach will help to determine whether the proposed plan is an effective choice amongst alternatives for environmental, social, and other objectives. The application must then show that prominent alternative plans have been diligently considered and are not able to meet the stated targets in a more effective, faster, cheaper, and or environmentally sound way. Choosing a cost-inefficient plan when better alternatives exist implies environmental, social, and economic damage due to the lost opportunity.

With a rationalised and comprehensive plan, public debate can address explicit links between features of a management plan and the performance criteria and milestones it is meant to meet, and thus help to find the most efficient policy available.

3 The Certificate Application disregards the policy of Metro Vancouver

While the project has been generally endorsed by the GVTA, and the proponent states that it supports some of the objectives of the Livable Region Strategic Plan (LRSP) (section 3.1.3.3), there are many parts of the strategic plan which are not supported. For instance, the first of four strategies of the LRSP is "protect the green zone" and the third is "achieve a compact metropolitan region". The only main strategy that this proposal could support is to increase transportation choice. While there is some discussion of the objectives of the LRSP in section 18.3.6 and discussion of various official community plans in the following sections, there is no effort to address the impacts on green space caused by population pressure.

Of the six affected municipalities considered in Table 17-25, only one supports the PMH1 proposal without system-wide tolling. Such concern on the part of a variety of democratically elected governments who are familiar with the urban planning costs and benefits that a provincial initiative can be expected to impose on them in the long run should raise a big red flag for reviewers of the application.

It is entirely within the Applicant's power to enter into agreements or partnerships with the GVTA and other agencies to improve modes of transport. Funding initiatives at the municipal and regional level should, where and if they can better meet the project's stated objectives, be pursued rather than focusing on a narrow claimed jurisdiction of the Provincial government.

The application fails to make a fair case for its project without a detailed exploration of settlement patterns, development pressures, and land use changes resulting from the project, including how those changes will affect the municipalities and GVRD, and what impact these costs and outcomes will have on measurable stated objectives. The applicant's prior claim that provincial roads and regional land use are separable issues must not be allowed to delay or obfuscate a proper assessment of the project.

4 The proponent relies on flawed point-estimate projections, ignoring well-established general-equilibrium effects of transportation policy

The greatest omission from the certificate application is a detailed assessment of the effects of increased commuting flow capacity on population growth and settlement density in the region. It is received wisdom that traffic volumes will swell to fill the space created by capacity increases. If this is true, the project will certainly not meet its stated objectives. Furthermore, the increasing population in the region will create unstoppable pressure on the region's agricultural land which will be gradually converted to residential and commercial land without a strengthening of existing land use policies. Urban sprawl will only increase as it has done in the past. If this argument is false, the proposal should have explained why that is, with detailed reference to the vast historical and geographic experience available to planners.

Relying on current point estimates of population growth, of transport mode choice, or of development rates is not convincing unless available experience from the real world indicates that such projections tend to bear out over the relevant time scales.

For instance, in a technical memorandum entitled "Impact of Enhanced Transit on Port Mann Bridge Traffic" and dated 12 June 2006, the proponent concludes from a trip diary study that "65% of the Port Mann Bridge demand consists of trips that cannot use transit as an effective alternative mode (such as truck trips, business trips requiring a vehicle, or by persons requiring their vehicle during the day)." The application repeatedly and exclusively relies on such point estimates from the current pattern of development. Since the project plans now include demand management and transit initiatives, the effect of these must be included in a comparison, as must the effect on transit demand of altered settlement patterns from different scenarios.

The application presents as a project benefit reductions in "emission output from reduced travel times and congestion." Since the overall volume of traffic, and ultimately congested traffic, will increase over the period of temporal scope as a result of the project, all else being equal, this must be elucidated in the application. Indeed, experience from similar projects indicates that the overall volume of congestion, noxious local and regional emissions, and contribution to greenhouse gases will increase from this project *Quinet and Vickerman* (2004).

To summarise, it is essential that the application coverage includes not just emissions from construction, and not just emissions from currently existing cars, but covers new cars and new trips induced by the project and all reasonably predictable changes to regional and global emissions as a result of the project. This cannot be done with simple extrapolation. Instead, imposing different likely development scenarios and appealing to the literature on road expansion effects is necessary for a proper account.

5 The application's evaluation of alternative plans does not meet the CEAA's criteria of due diligence

"As responsible authority under CEAA, Transport Canada is requiring a consideration of alternatives to ensure that the proponent of this large infrastructure project has shown due diligence in planning the project." [Letter from CEAA, 17 October 2006]

To be accountable to the wealth of modern planning experience for meeting the stated objectives, the alternatives included in the Application must encompass the full range of policy instruments available:

- regulation (laws, rules)
- financial incentives (e.g., taxes, tolls)
- outreach (education)
- directed (public) investment (e.g. in transit, rail, road infrastructure, etc)

The first three address demand-side management. In the Application, the project must be evaluated against the alternatives, since an inefficient use of resources given readily available tools and experience must be judged as environmentally, socially, and economically damaging.

The set of alternatives considered must be accountable to (ie must span and must reference) a reasonable set of possibilities from comparable regions elsewhere and from major policy reviews, such as the OECD studies mentioned above. Additionally, in comparing likely outcomes of the proposed plan with alternatives, the application should have included representative examples of measures of success from similar experience in other regions.

A succesful application must reflect an adequate level of effort in considering the impact of alternatives. Because major, fundamental objections have been raised by local and regional governments with legitimacy over decision making in regional planning, the application should have explicitly addressed in detail the alternative transportation planning options already put forward by local organisations, existing documents such as the LRSP, and local and regional governments. As we stated in responding to the draft Terms of Reference, this should be a possible reason for denial of the Application.

Has the applicant shown that the major, obvious alternative plans for easing commercial and commuting traffic through a combination of tolls, privileged transit on-ramps, privileged HOV, and rail or alternate shipping infrastructure can not more effectively meet its stated goals? The answer in the current application is clearly "No."

Instead, the given evaluation of alternatives to the suggested PM/H1 project is quite limited. Generally, possible alternatives are discussed individually, whereas any reasonable project, such as the one proposed, would take advantage of a number of available policy instruments. The proposal is for a mix of capacity increases, HOV lanes, and transit increases. However, an alternative such as one in which significant tolls are introduced with the revenues applied to transit infrastructure improvements is not discussed.

Artificial restraints are placed on the alternatives: it is stated that toll increases without additional capacity is not a possibility due to government policy (section 3.2.5.5). Nonetheless, if capacity were counted in terms of numbers of people rather than numbers of vehicles then additional transit should be considered. The possibility of additional transit is dismissed because it is not part of Translink's 10 year plan (section 3.2.5.6). Certainly, such important regional planning should be worked at together with Metro Vancouver, Translink, and the Province rather than each body individually and incrementally adjusting its plans based on what another body has published. The transit based alternatives discussed in section 3.2.6.2 do not take into account ridership increases if tolls were introduced and infrastructure improvements for busses were implemented (such as transit lanes on and east of the Port Mann Bridge, additional park and ride lots). It is unlikely that transit based alternatives would become significantly used while private-car use remains faster and so much cheaper (tolls are mentioned as being \$2.50 when a transit fare is \$4.50).

No other goods transport options such as a new rail depot are treated as alternatives. Most importantly, system-wide tolling (Section 3.2.5.6) has not been seriously studied in combination with transit initiatives, preferential lanes, and queue-jumpers.

6 The proposal ignores the opportunity for immediate relief which can provide major benefits before bridge construction begins

As noted in Section 17.7.8, the GVTA's 2005-2007 three-year plan included the objective to "[c]omplete queue jumper lanes at the Port Mann Bridge by 2007' (subsequently deferred to completion of bridge expansion)". That is, the insistence by the proponent to delay other effective means of attaining its transport goals is displacing faster, cheaper, more transparently generated plans. The fact that the GVTA would have, but is as a result of the application no longer planning to, implement these urgently needed measures is:

- evidence that the applicant has not properly considered available alternative tools
 to promote transit, change patterns of car use, and promote high-density development,
- 2. evidence that the applicant is proposing a plan that is in conflict with the existing plans of regional government, and
- evidence that long-term effects on household decisions concerning car ownership, residence and employment location, and commuting modes are already in effect due to the proponent's insistence on deepening the region's dependence on car ownership.

These opportunities must be taken into account in order to compare the costs of road expansion versus ecodensity-oriented alternatives.

Section 18.6 states:

There is potential for increased land speculation and pressure on the ALR east of the Port Mann Bridge as a result of PMH1. It is difficult to quantify the potential effects on agriculture from increased development pressure. ... Transportation demand and congestion reduction measures such as HOV lanes, improved facilities and features for transit (transit priority ramps, HOV) and a toll on the Port Mann Bridge are intended in part to mitigate these potential impacts. (emphasis added)

The proponent clearly recognizes that land use change initiated by the prospect and realisation of the PMH1 project would increase congestion pressure on the Port Mann bridge and Highway 1. Furthermore, the applicant proposes precisely the obvious alternative package of tolls, priority ramps, transit, and HOV lanes to mitigate this problem of induced congestion. How can it be, then, that the applicant does not offer these combined measures as a direct, faster, and simpler solution to the congestion it claims to be addressing? Nor as an immediate relief measure to be implemented prior to any construction on the bridge or highway? This disconnect constitutes a fundamental flaw in the proposal.

7 The application is based on deep contradictions regarding scope

The provincial government is the project proponent. In the certificate application it is claiming to not have power to change its own policy on tolling, nor on preservation of agricultural land, and that land use changes such as development density considerations are not under its jurisdiction. It claims that increases to transit are not possible because Translink, a body formed by the province, has not put increased transit in its 10 year plan. These unacceptable claims undermine the credibility of the proponent's effort to engage constructively with available options and to seek a solution which is driven by its stated objectives.

The following major problems remain with the acknowledged scope of the EA application:

- The Executive Summary of Chapter 17 contains the unacceptable claim that "responsibility for land use lies with local governments." Land use effects are the largest impact of road expansion decisions. Road and bridge infrastructure lasts for many decades. On a large project like this, offloading all the development externalities onto lower levels of municipal or regional governments, over which the Province ultimately has jurisdiction, is impractical and represents crooked accounting.
- Similarly, the application must not renounce the Province's responsibility for and
 influence over regional transit. This is especially unacceptable considering that
 transit initiatives have become an important part of the proposal, and that the
 Province has recently intervened massively in the governance of the GVTA.

- The temporal scope of the assessment is offered at 10 years for most impacts. This horizon must be justified by the mandate of the assessment agencies and the nature of the dominant impacts rather than entrenching possibly poor practice. Alternatively, another rationalised technique such as net present value of effects (within a much longer time frame) may be used. Given the timescales for social effects of low-density growth and altered development incentives which the project would incur, and given the Province's long-term climate objectives, the current ten year assessment period is inadequate for many impacts of this project. Such land use changes are well accepted to have capital turnover time scales closer to a century. We recommend 40 years as a temporal scope of environmental and social effects, in order to match the federal government's most recent targets for long term climate policy to 2050. Land use planning will certainly become a central feature in climate policy and mitigation by then.
- Section 3.2.5.5 mentions the Province's own proclaimed tolling policy. The Ministry of Transportation announced its policy on tolling in 2003, when plans for the current proposal were well underway. This announcement is not the product of any legislative process and cannot possibly be taken to hold up a thorough assessment of alternatives on a major project such as PMH1. Simply revising that stated policy is most certainly "within the ability of the proponent to implement".

The Terms of Reference for this assessment state the following:

The scope of the assessment of the Project includes the Project's potential direct, indirect and cumulative effects, as itemized in the ATOR. Under the ATOR, the scope of the assessment focuses on effects for which a reasonably direct causal link can be demonstrated between some aspect of the Project and the resulting effect. Relevant effects are usually (but not always) those for which the Proponent has the ability (including jurisdiction) to implement impact management measures to mitigate the concern.

The scope of this assessment has been clarified through a supplementary letter from the Canadian Environmental Assessment Agency (CEA) on October 17, 2006, stating:

"Alternatives to" the project are defined as functionally different ways to meet the project need and achieve the project purpose from the perspective of the proponent. ... In this case, the problem has been described as being increasing traffic volumes along the Highway 1 transportation corridor. ... There may also be ... alternatives to reduce congestion that have been investigated such as improvement of transit links, introduction of rapid transit along the corridor and other traffic reduction measures. If these are within the ability of the proponent to implement, they should also be described.

As part of the analysis of alternatives to the project, the proponent would describe the relative costs, benefits and environmental effects of these alternatives.

Clearly, considerations of development density and land use, behaviour change, coordination and integration with other regional and local governments, and alternate plans grounded in methods espoused by the LRSP are all within the ability of the proponent to implement and are relevant to the official scope. This necessitates major changes in the applicant's approach towards collaboration and transparently evaluating candidate solutions based on explicit objectives.

8 The EA submission is not legitimate because the traffic projections on which the EA is based do not reflect Macquarie Infrastructure Group's business plan for the Port Mann toll

According to Section 21.2 "Provincial Tolling Guidelines for Transportation Projects", it is the intent of the applicant that "Tolls will be used to generate revenue for transportation projects and to provide a return on the investment of the private sector partners."

Among the reasons given for the selection of an "open road" point toll system for the Port Mann bridge is that such a toll is "most effective at limiting future traffic growth" (section 21.3) This benefit of tolling as a demand management mechanism is reiterated in section 21.7: "(T)olling...is a tool which can help to limit growth in traffic over time..." However, this putative aim of the Gateway Project is contradicted by the stated agenda of the private toll operator (in this instance Macquarrie Infrastructure Group) who states on an MIG Fact Sheet entitled "Why Invest in Toll Roads?" that private toll road schemes generate "predictable cash flows" because "traffic growth and therefore revenue growth, tends to increase annually. For example, MIG experienced traffic growth of 9.8% for the six months to December, 2006" (italics added) (Macquarie Infrastructure Group, 2007). In order to ensure continued traffic growth on tolled roads, Public Private Partnership (P3) contracts historically include non-competition clauses, restricting alternative transportation options. This presents a strong prima facie basis for believing that private toll operators with a vested interest in traffic growth, cannot be good for the environment. Unless the EA addresses this internal inconsistency between the Gateway Project's stated goals and the intent of the private toll operator, it cannot be considered a legitimate assessment of the environmental impacts of the project.

9 The public consultation regarding PMH1 tolling was not legitimate because critical, substantive information about the toll was omitted from public surveys

Section 21.7 of the EA discusses the fact that the GVTA did a survey to determine public opinion on a range of transportation topics, including tolling. This survey found that

more than half the respondents (59%) "indicated that tolls should comprise a mediumsize, or a large part, of the funding" for new bridges and roads, while "when the same question was asked about tolling existing bridges and roads, that support fell to 36%." Similarly, the Gateway Program's pre-design public consultations in 2006 found that "56% of respondents support a 2.50\$ toll on the Port Mann Bridge" (section 21.7) However, these surveys did not constitute meaningful public consultation, because none of the surveys on tolling mentioned that the new toll would be collected by a private toll operator. The survey questions on tolling, lacking their proper context, were misleading. The pre-design consultations stated promises that the new twinned Port Mann will "have the capacity to accommodate potential future light rail rapid transit," and display boards prominently showed artistic renderings of the twinned Port Mann with rapid light rail. Thus questions regarding tolling were set in the larger context of promises about rapid light rail transit, when in fact there is no connection between them. An honest survey of public opinion on tolling would have compared support for a new toll run by an international road-building corporation, such as Macquarie Infrastructure Group (which identifies itself as "one of the largest developers of private road tolls in the world") and support for tolls on existing infrastructure intended to fund a comprehensive regional public transit expansion. It is very likely that the survey questions about tolling were trading on the public's demonstrated interest in public transit. Under the proposed scheme, rapid light rail across the Port Mann bridge will not exist until after MIG or a similar private investor has received the return on its car-based investment, decades from now.

The importance and relevance of failing to disclose the involvement of a private road toll company is further supported by the fact that, in the "additional comments" section of the Pre-design Community Consultation on Access and Interchange Improvements Summary Report" (p.14), the most common comment proffered (16%) was that the Gateway Project "needs to include more public transit or extend public transit," while only 9% of additional comments said that "the project was needed and over due." These findings are particularly significant, because this "additional comments" section (question 13) of the Phase 2 pre-design survey was the only opportunity for the public to address and proffer comments on the Gateway Project as a whole, outside the confining context of pre-fabricated questions on mere details of the project. (Curiously, there was no equivalent "additional comments" section in the Phase 1 pre-design consultation for Port Mann-Highway 1 aspect of the project). It further supports the likelihood that respondents' enthusiasm for tolling was a reflection of their belief that the toll was connected to getting more public transit.

There is another important reason why failing to disclose the involvement of a private toll operator constituted inadequate public consultation: in it's Fact Sheet "Why Invest in Toll Roads", Macquarie identifies "long term assets," stating that "toll road concessions are typically long term in order to allow the concessionaire to amortize the cost of the road over many years... The weighted average length of MIG's concessions remaining is 61 years (as of June 2007)." In an era where members of the public are genuinely seeking alternatives to the private automobile (in light of climate change, likely hikes in oil prices, etc.), this represents a concerning, long term commitment to the use of cars and trucks in the lower mainland. This is demonstrably not what the public wants. The failure to disclose the involvement of a private road tolling operator

meant that the public was unable to properly judge the time-frame of this commitment to expanding a car-based road system.

Lastly, the social costs of different funding options has not been addressed. Publicly financed (for instance, through an infrastructure bond issue) public infrastructure preserves democratic planning incentives and imposes significantly lower overall social and fiscal costs on the public.

10 The application's cost-benefit accounting is flawed and ignores the largest costs

The application's accounting ignores the the bulk of costs due to induced traffic from changes in settling patterns, commuting decisions, and land use change. These, properly assessed, may well have a net present value that negates the entire benefit claimed by the applicant.

Section 18.4.11 of this application states the following:

The increased capacity of Highway 1 and the Port Mann Bridge has the potential to increase pressures for growth in Surrey, Langley, and areas to the east. In turn, this may increase the numbers of applications for exclusions of land from the ALR for residential, commercial, and other purposes. Similarly, it may increase the rate at which farms outside the ALR (such as those just west of 216th Street) change from commercial operations to hobby farms or other uses. Quantification of the potential effects on agriculture from increased development pressure is difficult

Nevertheless, these hard-to-quantify effects must be shown not to be more important than the benefits the project claims.

In addition, the cost-benefit analysis ignores the cost of doing "nothing" until 2013. Costs and benefits relate to comparisons between one opportunity and another. The proposal currently excludes the possibility of immediate action based on rapid implementation of mitigation and demand management strategies on existing road surfaces and new preferential access ramps, as discussed above. The present value of these measures would reflect immediate and growing benefits in congestion relief as they influenced development decisions.

The cost-benefit calculations ignore the cost of climate mitigation, which is very likely to climb steeply during the period of scope, given the Province's climate commitments and entry into a regional carbon capping market. In order to convincingly avoid huge errors in accounting, a climate-neutral project could be proposed in place of the current GDP-growth-oriented concept. Referring to standard past practice is not a sufficient standard in the current climate.

Parry et al. (2007) have documented total social costs of driving on public roads. These are shown in Figure 1 on page 14. Evaluation of climate related costs are likely to increase rapidly in the future. Note that traffic accident costs are nearly as high as congestion costs. This means that inducing more people to drive, even if they are experiencing less congestion, may not be the net social gain claimed in this application.

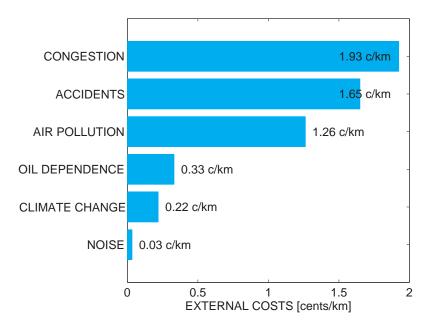


Figure 1: Social costs of driving

Lastly, the cost-benefit paradigm used exclusively by this proposal ignores modern scientific knowledge on actual well-being outcomes. Quantitative measures of life satisfaction indicate that without intervening incentives, disaggregated decision makers significantly misallocate their resources. A modern account of social impacts should therefore not rely on market-measured revealed preference to determine benefits and costs. For instance, in terms of subjective well-being, a one hour commute (each way) is worth about 40% of median income (*Frey et al.*, 2004), even though this is not reflected in choice behavior. In choosing their residence location and job site, people systematically fail to correctly predict this tradeoff, likely as a result of being overly preoccupied with numerical income and underestimating the personal cost in well-being of a long daily commute. In line with the OECD recommendations discussed above, a long-term strategy for transportation planning must identify behavioural change, and the concomitant incentives, as a primary means to reducing congestion. Without a central focus on this signal given to those making settlement and development choices, the cost-benefit analysis is likely to gravely underestimate the costs of road expansion.

The application is biased towards growth effects on only one side of the equation:

The completion of PMH1 improvements is anticipated to encourage economic activity as a result of reduced congestion, and to facilitate land absorption in already established or emerging industrial/commercial employment areas. PMH1 is predicted to accelerate development within currently zoned industrial lands, and allow more intensive land use (through improved accessibility and as the result of higher land values), generating earlier Development Cost Charge revenues, and providing employment

growth. Improvements to existing and proposed new interchanges may foster additional employment-based development. (Chapter 17 Executive Summary)

The details in Chapter 17 do not address land use change which is inevitable from the increased incentive for low-density development that would be generated by the proposed project. Such long-term, large-scale development effects will outweigh the impacts considered in the application. These effects could have been readily, though crudely, estimated through analysis of the literature on urban transportation and land use change.

11 Public consultation associated with the project is inadequate as it did not address alternatives

In the "Order Under Section 11" which initiated this review, the Project Assessment Director states that "Prior to this Order taking effect, the Proponent consulted with the public with respect to the Project." Consulting "with respect to" the project is not a sufficient criterion for public accountability. Consultation has never invited public feedback on alternative plans which may meet the project's objectives sooner, more cheaply, with less disruption, and with fewer external costs on society and the environment, despite consistent, evidence-based objections from local governments and civil society that the proposed plan is misguided given its own objectives. The proponent has consistently and actively discouraged any belief that the basic model of twinning the Port Mann bridge may be subject to reversal due to public, environmental, or fiscal considerations. Alternative plans to meet the basic objectives were never on the table in public consultations, and were actively discouraged at all levels with the mantra, "It's a done deal." This has largely removed the public from the process. A permit cannot be granted to a project whose rationale is not transparently based on its stated objectives.

12 Approving this application would represent a giant step into the past

While Calgary and Toronto have each just announced that they are undergoing bold multi-billion dollar investments in transit, and despite a BC Provincial commitment to reorganizing the economy towards climate neutrality, this region appears to be on the brink of spending billions on possibly making the congestion problem worse. Denying this permit will spur a more creative, less ideological, experience-grounded solution that will promote the livability, economy, and sustainability of our region. The applicant must be advised to organize and implement the "mitigation strategies" (predicted to be effective in Chapter 18) of (system-wide) tolling, priority transit on-ramps, priority HOV, and new bus rapid transit immediately in order to address its stated objectives, and to hold off on contracting of bridge construction or highway expansion until these cheaper, faster, more behaviourally founded and less damaging measures have been put into effect and allowed to exert their influence.

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