COMMENTS ON THE STUDY DESIGN REPORT ENTITLED "*FUTURE INTERPROVINCIAL CROSSINGS IN THE NATIONAL CAPITAL REGION EA STUDY*".

Submitted by Common Sense Crossings April 2010

INTRODUCTION:

The purpose of this document is to provide AECOM Delcan and PACE with comments, questions and suggestions resulting from a review of the draft Study Design Report. Our intent is to support the consultants' efforts to develop a Study Design that supports a transparent unbiased approach to assessing the three proposed interprovincial bridge options.

1: DEFINITION OF STUDY AREAS:

Up to now, the 3 corridors have been defined consistently and clearly. However, in this report there is such a significant change in the borders of Corridor 6 that the credibility and the transparency of the process are put at risk.

The NCC decision to carry forward Options 6 & 7 was based on the corridor descriptions laid out in Phase 1. In the draft Study Design, the change in width for Option 6 is significant enough to accommodate a new option, described by many as the Canotek option. Although this is frequently put forward as an option, it was eliminated in Phase 1 on the grounds that there is insufficient room on the 174 for an interchange at that location and for issues of soil instability in this area. To incorporate this change into the corridor definition now is tantamount to introducing a fourth option and contravening the decision made by the NCC Board of Directors in February 2009.

If there were sufficient reasons provided in Phase 1 for eliminating this corridor, a written justification must now be provided for any new corridor alteration. If this new Option 6 corridor is accepted as part of the study design for Phase 2B then there should be opportunity for other options to be considered. Incorporating this corridor into the study appears to negate the findings of Phase 1, and lends credence to the criticism that the Phase 2 EA is a tactic to put the bridge anywhere but Kettle Island.

2: MODELS OF THE 3 CORRIDORS:

The public needs to be given the opportunity to see realistic physical depictions of the proposals in their actual landscape in order to truly grasp their nature, scale and impact. They should be shown how the facilities would look from a broad range of vantage points, both on land and on water. They should be shown how the views of various well known landmarks would change with the interjection of the proposed facilities. These methods have been used in other consultation processes where major physical interventions are proposed, and we see absolutely no reason they shouldn't be used as soon as humanly possible in order to give members of the public a clear and realistic impression of what is being proposed.

3: MEANINGFUL NAMING OF THE CORRIDORS: The three options should be renamed to convey their actual geographical locations. We would suggest: Aviation Parkway/Kettle Island/Monte Paiement; Eastern Greenbelt/Greens Creek/Templeton; Eastern Greenbelt/McLaurin Bay/Gatineau Airport.

In addition, Phase 2B should incorporate signage along side roads and recreational pathways to identify the corridors, and give the public information on the EA process and how to get engaged, similar to how the City of Ottawa would post a site development plan.

4: TIMELINES:

The Draft Study Design report outlines steps in a proposed work program and steps in the EA study for Phase 2B but does not indicate any time lines. There must be at least a notional sense of probable time lines, particularly in relation to when the functional designs are likely to be established, when the corridors are likely to be ranked and when a recommendation on a preferred option is likely to be made. This should be shared with the public and be provided in the Study Design report in June.

3: KEY ENVIRONMENTAL FEATURES:

Although the table in section 2.2 is illustrative only, it revealed very little about how factors and sub-factors would be developed. Appendix 1 of the Draft Study Design Report was only available at the most recent public consultation, putting members at a considerable disadvantage in providing meaningful input. Going forward, it will be important to have detailed discussions on how the alternative proposals will be evaluated, as this sets the stage for how the alternatives will be evaluated and ranked. We feel that it is particularly important to compare long-term induced impacts of the alternative proposals, an aspect that does not appear in this draft.

Regarding the types of examples provided, they appeared to be weighted towards emphasizing the Kettle Island environmental features. Most of these environmental issues apply equally to the 2 Greenbelt Options. A more balanced approach would convey to readers of this report that issues raised by those concerned about the Greenbelt Options, are also being heard and incorporated into the study design.

In light of the importance of these Evaluation factors, a much more substantive description of what is meant by each sub factor needs to be provided. Only at the public consultation, did we learn that there are 23 sub-factors defined to date. All of the sub-factors appear to be valid with the proviso that the geographical areas that will be affected must be defined, not according to the corridors, but according to the probable environmental impacts of each option. This point is expanded in the Environmental Assessment section.

Specific feedback on the Environmental Features

- **Natural factors**:
  - The Greenbelt should be in an important category by itself. National Interest Land Masses are the property of the people of Canada, not just a local community. Such designations are for the benefit of, and funded by, a much larger community.
  - The limits of the study area must be carefully defined and expanded well beyond the corridors when considering the overall impact on these fragile and environmentally significant natural areas. For example, it would be important to include the Mer Bleue to Green's Creek corridor in the study as this is a contiguous ecologically sensitive area, the health of one affecting the other.
  - Perhaps the entire Ottawa River should be considered in light of the fact that McLaurin Bay is considered to be the 'liver of the river'. Just how destructive and far reaching would be the effects of building a bridge in these natural areas?

- **Water use & resources**:
  - Green's Creek area is heavily used by boats of all descriptions, including canoes, kayaks and sailboats. There is also a well used boat launch at the bottom of Shefford Road, at Beacon Hill and a large marina across from Greens Creek on the Gatineau shore.
  - In winter there is extensive cross country skiing and snow shoeing (with the occasional dog sled) along the entire length of Green's Creek.
  - During the summer there is swimming, waterskiing and jetskiing off the banks of the river. There are also many fishermen and several fishing clubs active in this area.
  - Mention was made of accommodation of float planes in the vicinity of the Rockcliffe Airport water facility. There are at least a dozen float planes moored across from the Green's Creek point at the Gatineau marina and other privately docked float planes in the Cumberland and Rockland area which would be impacted by the 2 Greenbelt options.
  - This speaks to the need to take a more balanced approach when describing environmental factors, realizing that, for all 3 proposed options, there are equally valid and important examples.

- **Social Environment**:
  - In the examples provided for this factor, there are many community institutions that have not been noted but would be affected by either option 6 or 7: the Residence St. Louis Long Term Care and seniors' community located right on the bank of the River; the Madonna Long Term Care and Nursing Home below which a clover leaf exchange could be built; the Bob MacQuarrie Sportsplex. There are also many schools, churches, and community amenities in the area.
  - Consideration must be given to the intense recreational use of the network of Greenbelt bike, running, walking and skiing paths. There are also many family homes, not cottages, along the river banks on both sides of the river. Again, the examples cannot relate only to the Kettle Island environmental features.
  - Community cohesion, noise, and aesthetics are issues for all Corridors and the report should clearly and evenly portray this. Community cohesion will be impacted by all 3 options, but in different ways which again underline the importance of detailed descriptions for each factor.
  - Because the Greenbelt is a national property, the negative social effects will affect more than neighboring communities. The Greenbelt is the property of the people of Canada and this must be respected. The evaluation factors must consider the impact options 6 and 7 will have on the ability of all neighboring communities to use the Greenbelt network of paths and walkways, from Ottawa to Petrie Island.
  - Visual intrusion of a new crossing is an important factor for both Greenbelt options. For Option 7, the proposed bridge would cross the river at a 35 degree angle in front of many homes on both sides of the river. The height of the bridge is equivalent to an 8 story building and would be a major visual intrusion as well as a major source of vehicular noise to communities adjacent to the Ottawa River .

- **Land Use and Property:**
  - Item 46, *Impacts to Rockcliffe Air Space and Run*way, is one factor for which clear and feasible mitigation strategies were identified in Phase 1. On the other hand, destruction of the Greenbelt or the visual intrusion of a bridge crossing the river at an oblique angle simply cannot be mitigated. The weighting needs to reflect this. This again underlines the argument that the Greenbelt merits separate consideration as an evaluation factor in itself.
  - There did not appear to be a factor to assess the impact on residential property values. Much of the development around Corridor 5 has taken place AFTER Corridor 5 was selected, 60 years ago. Property

owners in that area knew, or should have known, that Corridor infrastructure was planned. Property values and property taxes have historically been lower than if there had not been planned bridge development at Kettle Island and an airport. Compensation for the land use effects of #5 have already been awarded by the market. This is not the case for the 2 Greenbelt options. These were unexpected. Many property owners have paid a premium for a location abutting the Greenbelt or Ottawa River, including higher taxes, in the belief that the Greenbelt was a constant.

- Although we agree with the sub factor of "Conformity with Official Plan and Other Land Use strategies " there is no mention of the impact of each option on urban sprawl, urban intensification and development. Both Greenbelt options will impact on the rates of residential development in Quebec where house prices are 30% less than in Ottawa. The other "Official Plan" that must be included is the Greenbelt Master Plan.

➢ **Traffic and Transportation:**

- **Trucking Factors:** Evaluation sub-factors need to consider
  - Increased costs to truckers due to route inefficiencies and detours
  - Increased costs of consumer goods as a result of higher trucking costs
  - Additional enforcement costs if a corridor or King Edward should be closed to truck traffic

- **Traffic Operations:** The evaluation factors appear to be based on the assumption that there would be improved traffic operations, which is questionable for the Greenbelt Options.
  - How will a reduction in traffic operations and efficiency be captured, particularly for local intra-provincial commuting?
  - Another missing factor relates to the impact of each option on the existing transit solutions. Construction of new bridge infrastructure would seriously inhibit transit construction in the east end as well as interfere with existing transit lines, like the bus lanes along 174.
  - Factors must assess the carbon footprint of the different options, for the immediate locality and the overall environment, since some corridors are significantly longer than others. This would include the incremental distance trucks and cars will need to travel with each option, as well as the pollution generated by constant traffic gridlock on the 174, once the estimated 3,000 additional trucks and commuters from Gatineau are added.
  - The changed traffic patterns, and the benefits and costs of such, are most amenable to proper benefit/cost analysis as a way to ensure proper decision making. Remember the negative lessons from the way the recent decision was made to locate the United States Embassy on Sussex Street in the middle of downtown, as opposed to the original proposal for its location at Mile Circle.
  - The results of related traffic and transit studies are important evaluation factors and will enhance an objective rational assessment of both traffic and transit operations. It is of concern that the relevant studies may not be completed before a recommendation on a bridge option is made.
  - If one of the reasons for an interprovincial bridge is to **significantly** reduce truck traffic on King Edward Avenue, how is this outcome factored into the evaluation of each option? What is the priority of this objective in the overall study?

➢ Costs: A suggested approach

- The report design presently says nothing about **lifecycle costs,** costs of environmental mitigation, nor anything about the costs of using the transportation network.
    - These costs plus capital costs, plus O&M costs, all properly estimated and all properly translated to the same terms (present value, future value, or annual value) provide maximum quantification of all alternatives.
    - There will also be changes in property values and development opportunity in the communities on both sides of the river that are "most affected" by the option chosen. This maximum quantification is essential to meaningful comparative analysis of the 3 corridors. It also minimizes the number of subjective issues, and minimizing the number of those issues is extremely important to logical, rational and defensible decision-making.

- The most important quantitative indicator of costs and benefits is **total lifecycle cost** of each alternative.
    - This should include the "Do Nothing" alternative, to ascertain if any of the alternatives has sufficient economic merit to warrant proceeding.
    - The lifecycle cost of the "Do Nothing" alternative will have large costs associated with using the existing transportation system, and no costs associated with a new crossing. On the other hand, each economically sensible (and defensible) alternative will improve transportation efficiency sufficient to counterbalance the cost of its new crossing.
    - Thus, the greatest benefit is the greatest reduction in lifecycle cost compared to the existing situation. It is essential that lifecycle costing be the basis for assessing alternatives**.**

- The costs of any crossing will be borne by more than local communities. Consideration should be given to the opinions of the taxpayers. Relying solely on representatives in the various levels of government may not necessarily reflect these values and the process is vulnerable to politics and party lines. Continue with the pubic consultations in order to "Ask the people". Cost does matter and in a time of limited resources, the public may decide that a bridge is not the highest priority in light of other transit and transportation needs.

➢ ENVIRONMENTAL ASSESSMENT "GOOD PRACTICE" PRINCIPLES

Spatial Scale Considerations

- The Draft Study Design Report states that the specific spatial boundaries of study areas for each environmental component evaluated will depend on the nature of the various factors or sub-factors. This is consistent with accepted good practice in environmental assessment.

- However, the report then goes on to provide a confusing discussion of the Local Study Area and the Regional Study Area, which in the former case is inconsistent with the above-stated principle, and in the latter case erroneous from an environmental assessment viewpoint.

- Important impacts of the project will occur at every scale. Some, like noise and effects on property values will be somewhat localized. Others, like vehicular traffic and safety have impacts that affect various segments of the population of the region in different way. Erosion of the land base of the NCC is an issue of national as well as regional importance, as those lands are held in trust for all Canadians. This also applies to the protection of biodiversity and special places; the consumption of irreplaceable agricultural

land; emission of air pollutants and greenhouse gases; and excessive and unsustainable resource consumption and attendant waste generation. All of these factors must be considered in examining irreversible options for the future.

Temporal Scale Considerations: As all of the above clearly indicates, the study design needs to ensure that the temporal bounds placed on the comparative analysis of environmental effects is appropriately long, since many of the more serious consequences of our action will occur well down the road.

Induced, Cumulative and Synergistic Effects: The Draft Study Design Report incorrectly defines the Regional Study Area as *the area in which there is potential for cumulative effects*. Cumulative effects result when the footprints of different projects or activities overlap and the net effect is greater than that of either, when considered independently. Such effects can occur at any scale, from local (e.g., noise from various sources) to global (e.g., greenhouse gas emissions). Synergistic effects can be thought of as a special case of cumulative effects that are not simply additive, but which react in some way to multiply the effect (e.g., two chemical that are much more harmful in combination than they are individually)

- In the present case, what is of greatest concern is the induced effects that are likely to result from the very existence of a bridge, opening up new possibilities for automobile access, more distant suburban development, loss of agricultural land and natural areas; noise and air pollution; greenhouse gas emissions; resource consumption and waste generation. These factors need to be very carefully evaluated over a long time horizon.

5: The Study Process

The purpose for the study is "*to examine ways to improve interprovincial transportation capacity across the Ottawa River to address long term needs*". **Nine** objectives, ranging from quality of life to enhancing regional economy to complementing transit objectives and plans, are then provided. With this number and variety of objectives, it is impossible to determine what weights will be assigned to each in the evaluation process. A much clearer statement about the project objectives and their priority is needed to convey the actual purpose of the study and prime decision criteria .

In the design report, "to provide high mobility and accommodate all modes of travel" is listed as a project objective. However, there is no combined road/rail corridor criteria mentioned in any of the evaluation factors and sub factors. If this is a project objective how will it be assessed without specific criteria being defined?

It is still unclear how some of the stated objectives can be met when there remain important data gaps:

- If the study intends to complement transit objectives and plans, then how and when will the **Interprovincial Transit Integration study** results (late 2010) be incorporated into the process?
- If the study intends to reduce congestion and remove trucks from downtown Ottawa, then how and when will the results of the **Strategic Goods Movement Study** affect the evaluation criteria? Will the results will be available in time for the sensitivity analysis of truck traffic scenarios?
- A similar question could be asked of **The Greenbelt Master Plan review.** How will the results be incorporated into the decision making process when the results will not be available until 2012.

- Although mention is made of numerous provincial and municipal projects currently in the EA process as well as municipal planning documents that are of interest to this project, the work program is silent on how they will be considered, if at all.
- Despite the EA Framework provided, there is little information about the environmental and technical studies and cost analysis being carried out.

The study design should outline how the results of all of these studies will be incorporated into the Phase 2B and communicated to the public. There are several important methodological questions raised in this report that remain unanswered. It seems that the report is long on process and EA frameworks but short on specifics regarding the actual methodology and integration of the technical and environmental study results.

Until a more explicit analytic framework for the work program is provided and communicated, it will be difficult, if not impossible, to respond effectively in the planned consultations of Phase 2B.

Finally, it will be vital to establish a meaningful forum for discussion between members of the Public Advisory Committee (PAC) and the Technical Advisory (TAC) on matters related to study design. If this does not occur, and the groups do not directly interact, the same credibility issues and lack of buy-in to the process that occurred in the previous study will occur again, to no one's advantage.

CONCLUSION:

This document represents a synthesis of comments, issues and concerns raised by members of Common Sense Crossings. The continued opportunity to provide input on this project and, specifically, on the Study Design Report is very much appreciated. As you can see from these comments, the proposed future interprovincial crossing is an important issue to our communities and one that people are willing to dedicate time and effort in order to have their voices heard. Thank you again for this opportunity.

Respectfully Submitted by Common Sense Crossings
April 22nd, 2010

INTERPROVINCIAL CROSSINGS ENVIRONMENTAL ASSESSMENT

ÉVALUATION ENVIRONNEMENTALE DES LIAISONS INTERPROVINCIALES

Comment sheet
Feuille de commentaires

Other Comments / Autres commentaires :

The councilors in the east end are arguing in favor of the Kettle Island corridor because they feel that the other two options will dump too much traffic on the 174 and it is already jammed up during peak commuting hours.

Where will the traffic go with the Kettle Island option? Either onto the 174 also, or on residential streets. Surely we don't want a solution that puts commuter traffic or truck traffic on residential streets.

I understand that there are already plans to widen the 174 to accomodate more traffic and this will surely happen before any bridge is built.

NAME / NOM :

ADDRESS / ADRESSE :

PHONE NUMBER / N° DE TÉL. :

E-MAIL / COURRIEL :

Please leave this comment sheet in the appropriate Comment Box. You may also send it by mail to Marley Ransom, PACE Public Affairs and Community Engagement, 302-370 ave. Churchill Ave., Ottawa, ON, K1Z 5C2 or by fax to 613-686-1889.

Veuillez déposer votre feuille de commentaires. Vous pouvez également l'envoyer par la poste à Marley Ransom, PACE Public Affairs and Community Engagement, 302-370 ave. Churchill Ave., Ottawa, ON, K1Z 5C2 ou par télécopieur au 613-686-1889.

To: Patrick Deoux, AECOM Delcan
From:
Re: Interprovincial Crossings Study
Date: April 2, 2010

The main cause of air pollution is exhaust from vehicles, especially the particulate matter (PM) from diesel engines. Unlike many toxic substances, there is no safe level of PM concentration and no means of mitigation except to remove the source. Children, the elderly and those with health problems are most seriously affected. The American Lung Association has stated that PM2.5 (fine size particle) is the most serious threat to our health. Air pollution from exhaust causes lung disease, heart disease, cancer, particularly leukemia in children, DNA damage to fetuses, premature birth and premature death. It is hard to come up with one other example of a factor so dangerous to human health. (Please see the attached list of key studies on air pollution)

The proposed Kettle Island Corridor has the largest population of any of the corridors studied. Approximately 12 thousand people in the Kettle Island corridor live within the 300 metre zone of influence of toxic air, several hundred families a few metres from the roadbed. Montfort Hospital, Montfort Long Term Care Facility, Our Lady of Mount Carmel School, and apartments housing mainly seniors are directly adjacent to The Aviation Parkway. A multi use recreational path runs beside The Aviation Parkway north of Montreal Road and plans have been approved by the NCC to extend this path south of Montreal Road.

Despite the very obvious evidence to the contrary, the Phase 1 consultants for this study determined, in Table 6-8, that the number of residences impacted by air pollution in Corridor 5, Kettle Island, was **zero**, the number of apartments affected was **zero**, the total population affected – **zero**. Montfort Hospital and the Montfort Long Term Care Facility were not even considered in the air pollution impact analysis. In addition to the patients, hundreds of people work in these institutions.

Our Lady of Mount Carmel School is 15 meters from the proposed truck route, the playground even closer and the consultants gave a score of "0" for the impacts on air quality. Crystal Bay School, which is 60 meters (four times farther away) from the proposed route in Corridor 3, received a score of 610 for the negative impacts on air quality. The school population of 122 was multiplied by a factor of five. According to the consultants this evaluation was applied in the sensitivity analysis "to capture the increased sensitivity of children to elevated air pollutant concentrations."

The reason Ontario and Ottawa want a new bridge is to remove the trucks from King Edward Avenue where they are a health and safety hazard to the people who live there. It is totally unacceptable to move the problem to other neighbourhoods. Phase 2B must conduct an extensive and accurate study of the air quality impacts on any potential bridge corridor. Because of the serious and in some cases fatal impacts of toxic air on humans, air quality impacts must be given a high weight in the evaluation of the corridors. The ideal solution is to select a corridor on vacant land.

The following is a list of key studies on air pollution and health effects near high traffic-areas.

- Air pollution from busy roads linked to shorter life spans for nearby residents
- Truck traffic linked to childhood asthma hospitalization
- Pregnant women who live near high traffic areas more likely to have premature and low birth weight babies
- Traffic-related air pollution associated with respiratory symptoms in two year old children
- People who live near freeways exposed to 25 times more particle pollution
- Asthma more common for children living near freeways.
- Children living near busy roads more likely to develop cancer (particularly high risk for leukemia)
- Most traffic related deaths are due to air pollution, not traffic accidents,
- Emissions from motor vehicles dominate cancer risk
- Cancer risk higher near major sources of air pollution, including highways
- A school's proximity to freeways associated with asthma prevalence
- Lung function reduction among children more likely if living near truck traffic
- Asthma symptoms caused by truck exhaust
- Exposure to carcinogenic benzene (associated with aplastic anemia and leukemia) higher for children living near high traffic areas

For more information on these studies see
http://www.sdearthtimes.com/et0603/et0603s21.html

A further study has shown that babies' DNA can be damaged even before they are born if their mothers breathe polluted air during pregnancy. This type of damage to the chromosomes makes people more susceptible to cancer. For more information see
http://ecomall.com/greenshopping/babyair.htm

Ottawa, le 9 avril 2010

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Objet : Évaluation environnementale des futures liaisons interprovinciales dans la Région de la Capitale Nationale (Réf. : 05-19680)

Madame, Messieurs,

En réponse à votre demande, faisant suite aux réunions publiques des 30 et 31 mars 2010, vous trouverez sous ce pli mes commentaires et suggestions sur votre rapport provisoire de conception de l'étude environnementale.

Dans l'espoir que vous pourrez travailler de façon plus objective que les firmes qui vous ont précédés dans l'étude de ce dossier, je vous prie d'accepter, Madame, Messieurs, mes sincères salutations.