

National Collaborating Centre  
for **Healthy Public Policy**

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# TRANSPORTATION POLICIES AND HEALTH INEQUALITIES: WORKSHOP

SUMMARY OF DISCUSSIONS | FEBRUARY 2011



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sur les politiques publiques et la santé

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## **PARTNERSHIP**

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## **ABOUT THE NATIONAL COLLABORATING CENTRE FOR HEALTHY PUBLIC POLICY**

The National Collaborating Centre for Healthy Public Policy (NCCHPP) seeks to increase the expertise of public health actors across Canada in healthy public policy through the development, sharing and use of knowledge. The NCCHPP is one of six Centres financed by the Public Health Agency of Canada. The six Centres form a network across Canada, each hosted by a different institution and each focusing on a specific topic linked to public health. In addition to the Centres' individual contributions, the network of Collaborating Centres provides focal points for the exchange and common production of knowledge relating to these topics.

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# 1 OVERVIEW

In 2009, a workshop on health inequalities associated with transportation policies was jointly organized by the Population Health team of Edmonton's regional health authority, the former Capital Health,<sup>1</sup> and the National Collaborating Centre for Healthy Public Policy (NCCHPP). The workshop was held on May 28, 2009 in Edmonton, Alberta and brought together representatives from the NCCHPP, Edmonton-based Alberta Health Services (AHS) staff with interest in transportation issues, traffic engineers and other public and private sector transportation professionals, urban planners, academics and members of non-profit organizations in Alberta, primarily from Edmonton and Calgary. The workshop was conducted to bring together practitioners with interests in the areas of transportation, health, and health inequalities to learn about transportation as a determinant of population health and to consider effective policy responses.

These notes are not intended as a formal report or proceedings from the workshop, but as an informal account of the activities and conversations that took place on that day.

## Context

The Population Health team within the Capital Health Region of Alberta had begun to engage with partners internal and external to the health sector to advocate for health-promoting public policy in the areas of land-use planning, transportation, and building design. The team had already produced documents and entered into various types of partnerships and collaborative relationships with local and provincial policy makers and policy influencers, including urban planning professionals in the Edmonton metro area. A workshop on transportation equity emerged as a strategic next step – a way to combine concerns about the health impacts of our transportation systems with the social gradient in health observed in major Canadian cities for almost all indicators of chronic disease and injury.

The NCCHPP was invited to collaborate in the development of a workshop on transportation policies and health inequalities.

## Workshop organizers and facilitators

This workshop was conceived by Sherrill Johnson (AHS), and developed by Sherrill Johnson in consultation with François Gagnon (NCCHPP). Brian Ladd and Marie Carlson (AHS) provided input on the workshop's content. The workshop was introduced by Sherrill Johnson and facilitated by François Gagnon. Local arrangements for the event were coordinated by Lori Flowers (AHS).

## The agenda for the day

Potential workshop attendees were identified ahead of time and invited by AHS, with suggestions for sector representation provided by the NCCHPP. Besides representatives of AHS and the NCCHPP, approximately 20 individuals external to the health sector participated in the workshop. Background information was shared with participants prior to the workshop; this

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<sup>1</sup> In 2008, all of the health regions in Alberta were dissolved. Alberta Health Services (AHS) was created in 2009, a single health services delivery organization for the whole province governed by a Board. Significant restructuring occurred over 2009 and 2010.

included an information sheet on urban sprawl and public health and a paper by Gorman et al. (2008)<sup>2</sup> describing a health impact assessment of Edinburgh's transport policy.

The workshop was organized around two objectives with two corresponding series of activities:

- 1) Develop a collective understanding of health inequalities produced by transportation policies.
- 2) Collectively develop pathways to solutions aimed at mitigating or reducing the unequal effects of the policies in question.

The workshop began with a roundtable of introductions aimed at identifying the participants' fields of interest. This exchange was followed by a general presentation by François Gagnon from the NCCHPP on the creation of health inequalities by transportation or transportation-related policies. The aim of the presentation was to make explicit the ways in which policies can be thought to create environments that are unequal in terms of health effects.<sup>3</sup>

### **Participants' fields of interest**

During the initial roundtable of introductions, the participants expressed the following specific interests and concerns related to the workshop. Not all of these concerns were addressed in the content presented, or in the discussions that took place in the workshop.

- Peak oil
- Urban sprawl
- Quality of life
- Vulnerable populations: the elderly, low-income persons, those unable to drive a car, etc.
- Reduced rates for collective transportation services
- Obstacles to using active transportation to get to work; implementation of programs and policies that support active transportation
- Ecomobility (modes of travelling other than alone in a car)
- Strategic urban planning
- Support for people that encourages them to become more active (beyond the basic message of health promotion)
- Creating relationships with persons who have similar concerns
- Transportation demand management
- Updating of parking regulations
- Making sure that collective transportation is not an afterthought of planning
- Age-aware communities
- Healthier communities that are better interconnected and more accessible to pedestrians
- Making it possible to remain in a community throughout the life cycle
- Work with non-profit organizations to create sustainable urban form
- Car-sharing cooperatives.

<sup>2</sup> See: D. Gorman, D., Douglas, M.J., Conway, L. Noble, P. and Hanlon, P. (2003). Transport policy and health inequalities: a health impact assessment of Edinburgh's transport policy. *Public Health*, 117. 15-24.

<sup>3</sup> The PowerPoint presentation used in support of this presentation is available here: <http://www.ncchpp.ca/docs/TransportationHealthInequalities.pdf>.



## 2 DISCUSSION AND ACTIVITIES

### 2.1 WORKSHOP OBJECTIVE 1: DEVELOP A COLLECTIVE UNDERSTANDING OF HEALTH INEQUALITIES PRODUCED BY TRANSPORTATION POLICIES

The manners in which actors link health inequalities to transportation policies are very diverse. Variation in the framing of health problems, in perspectives on determinants and in the populations identified is significant. Moreover, variation is equally apparent in the ways in which these policies are thought to generate health inequalities. For example, in surveying the grey and scientific literatures, it is readily apparent that some studies and reports focus attention on respiratory health problems, while others concentrate on mental health problems, unintentional injuries, chronic diseases in general or cancer in particular, and so on. The determinants noted in these documents are just as diverse: road and route design, volume and/or rate of car use and of other modes of transportation, population density, air pollution, and so on. As for the definition of populations said to be subject to the unequal impacts of transportation policies, they are defined according to many different criteria or principles: place of residence, mode of travel, socioeconomic status (SES), income, ethnicity/race, gender, etc. Finally, with respect to the aspects of transportation policies that are thought to generate health inequalities, some believe that pre-existing characteristics of the built environment interact with context-blind policies to generate inequalities (for example, the residential road planning policies of inner city (often lower-income) neighbourhoods are sometimes said to encourage cars to go faster, thus generating comparatively more collisions in these neighbourhoods). Others state instead that it is the absence of certain characteristics that generates inequalities – for example, the lack of adequate collective and active transportation services to access sports and leisure facilities can generate inequalities for low-income persons.

The aim of the first part of the day, entitled “Mapping the problems,” was to support actors from the Edmonton region in developing a framework through which to view the problems by collectively exploring the way or ways in which the problems could or should be defined.

The participants were divided into sub-groups to carry out this work. To organize the discussions, each group was assigned a specific problem and one or more specific determinants. The following health problems and determinants were used to generate the problem space for this exercise: unintentional injuries (weight and speed of vehicles, collisions); respiratory illnesses (air pollution); chronic diseases (obesity, social network); mental health (social network, stress, physical activity, quality of sleep).

Each group was asked to work with a simple analytical grid to define its problem by specifying: the nature of the problem at hand; the determinants of the problem; the population exposed to inequalities; and the way that public policies contribute to these inequalities.<sup>4</sup>

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<sup>4</sup> To facilitate this work, the discussion guide *Mapping the problems: A discussion guide* was distributed (See Appendix A).

The following section presents a rough summary of the ideas that emerged through the discussions during the “Mapping the problem” activity:

### **Chronic disease**

- Access to food (or employment, health care, etc.) is restricted through transportation and cost limitations.
- The targeted group includes those with a lower socioeconomic status, but the problem is not exclusive to them.
- Once the problem begins to affect the affluent, solutions will arise.

### **Mental health**

- The disadvantaged groups include minorities, seniors, those with disabilities, the poor and chronically unemployed and/or homeless.
- Entry points for action include transportation mode (car, bike, public transit, foot, etc), travel time, ease of use of active transportation, access, safety, mixed use and mixed density.
- Have to discuss what people are willing to pay for these changes, even if they claim they want them.
- Need to create communities people can afford.
- Have to create compact communities that are perceived to be as safe as suburbs.
- Will require leadership and forward thinking to move this forward; will require politicians willing to take a stand.
- This will require looking at policies through a health lens.
- Can frame solutions to some transportation problems as economic arguments: e.g. building an LRT line provides more jobs than building roads.

### **Unintentional injuries**

- Determinants include a car-dependent culture, the values of the political climate, and roadway design.
- Disadvantaged groups include children, lower socioeconomic status groups, and rush hour commuters (affects all modes).
- Related transportation policies include: traffic calming and policies that consider cyclists as more than just an afterthought.
- Current provincial legislation (the *Municipal Government Act*) doesn't allow municipalities to dictate that developments be composed of a certain percentage of affordable housing.

### **Respiratory illnesses**

- Disadvantaged groups include pedestrians, cyclists, and motorists in congested areas, people with susceptibility to (or pre-existing) respiratory illnesses, and older adults and children.
- Related transportation policies include those dealing with parking, availability of transit, bike lanes, road planning, traffic calming, transportation demand management, car sharing, telework, flex hours, auto insurance policies, anti-idling bylaws, and legislation related to emission standards, behaviour taxation, and electric vehicles.

## 2.2 WORKSHOP OBJECTIVE 2: COLLECTIVELY DEVELOP PATHWAYS TO SOLUTIONS AIMED AT MITIGATING OR REDUCING THE UNEQUAL EFFECTS OF THE POLICIES IN QUESTION

As an introduction to the second part of the workshop, François Gagnon suggested that there are many policy options for responding to a given health inequality problem. For example, we may wish to act on multiple chronic diseases by targeting obesity, and there are various ways this can be done. It is quite common, in this case, to see public health authorities defending policies aimed at reducing (in absolute terms or relative to other modes of travel) the use of cars over a more or less extended period of time, on the rationale that sedentary modes of transportation contribute to a population-level obesity problem. To do this, public health authorities sometimes promote policies encouraging dense, multifunctional planning of urban areas (integrating workplaces, residences, businesses, etc.), making them accessible through collective and active modes of transportation. However, these authorities may also militate for financial incentives for persons using collective or active means of transportation.

The objective of the second part of the workshop was to explore the most promising strategies given the political context of the region and, more generally, of other Albertan cities. The exercise proposed to participants was to conceive of a public policy intervention that could respond to current problems as defined during the first part of the day, taking into consideration the policy's political feasibility within the context of existing coalitions of actors and known or suspected government rationales for transportation-related policy. Specifically, participants were asked to define a strategy by first discussing the problem the strategy is intended to address; the inequalities and determinants it would make it possible to act on; the groups that would benefit; and the potential benefits and the potential disadvantages.<sup>5</sup> Second, participants were asked to reflect on ways in which the proposed strategy could be tied in with existing political rationales and coalitions of actors.<sup>6</sup> In order to stimulate reflection and discussion, a diagnosis of the situation in the Capital Health region was presented along with potential strategies for addressing it.<sup>7</sup>

Below is a summary of participants' ideas developed during the "Assessment of political feasibility" activity:

### Respiratory illness

- Strategy: develop comprehensive emissions standards at the federal level; would include standards for transportation, industry, agriculture, etc.
- Municipalities could meet these standards by legislating anti-idling bylaws, banning car starters and drive-throughs, limiting parking, improving public transit, changing the zoning bylaw, encouraging companies to provide flexible work options, and designating roadways for public transit, cycling, or carpooling.

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<sup>5</sup> To facilitate this work, the discussion guide "Imagining resolutions I: a discussion guide to basic strategy assessment" was distributed (see Appendix B).

<sup>6</sup> To facilitate this work, the discussion guide "Imagining resolutions II: a discussion guide to assess political feasibility" was distributed (see Appendix C).

<sup>7</sup> The PowerPoint presentation used for this purpose is available here: [http://www.ncchpp.ca/docs/TransportationHealthInequalities\\_Strategies.pdf](http://www.ncchpp.ca/docs/TransportationHealthInequalities_Strategies.pdf).

- Groups benefiting: everyone, but especially those living near major arterials or industrial areas, those living in high-density housing, etc.; this would (presumably) benefit most those who are the most disadvantaged.
- Potential benefits: encouragement of public transit use, fewer cars on the road, lower emissions levels.
- Potential unwanted consequences: economic consequences for companies forced to comply with standards.
- Rationale: government has a mandate to protect population health and security, would prevent some healthcare costs, retrofitting would create jobs, companies who retrofit could sell energy back into the grid, could create economic development by developing technologies that could be exported and by marketing the city as a model of sustainability.
- Strategies or projects: LRT extensions, Municipal Development/Transportation Master Plans updates.
- Potentially interested actors: energy companies looking to diversify, health regions, medical associations, environmental groups, professional associations (e.g. planners), some politicians.
- Potential opponents: developers, big business, financial industry, agricultural air polluters, automobile retail industry.
- Critique: opponents are all major economic drivers; have to balance regulations with economic feasibility.

### **Unintentional injuries**

- Strategy: provide supports for livelihood/health via better transportation options (to school, work, childcare, social opportunities, etc.) in lower socioeconomic areas. Will be accomplished by providing reduced capacity buses and providing resources close to where people live (e.g. nutritious local grocery stores).
- Proponents: non-governmental organizations concerned with poverty reduction, food security groups, Family Community and Support Services.
- Challenges: municipalities targeting one neighbourhood could be seen as biased.

### **Mental health**

- Strategy: determine key amenities that must be located within a 25 minute (non-car) commute of all housing. Amenities could include libraries, doctor's offices, employment, etc.
- Benefits: reduces costs of parking, gives sense of equality to all neighbourhoods, increases neighbourhood safety, increases property values (and thus tax revenue).
- Related projects: municipal development/transportation master plans.
- Proponents: city administration, politicians, community leagues, residents.

- Opponents: former neighbourhood grocery store owners that have sold property with restrictive covenant clauses requiring new owners to refrain from grocery retailing (of a certain size) for a set number of years.
- Targets new neighbourhoods, but could look at older ones too.
- Action: meet with retail services to see if it's feasible to have certain services so close to each other.
- Density requirements needed.
- Could tax grocery companies that prohibit other grocery companies from redeveloping their closed-down sites (i.e. disincentivize restrictive covenants).
- Need to consider how the winter climate could be a barrier to active transportation.
- Challenge is to define which amenities are key.

### **Chronic disease**

- Strategy: Transform neighbourhoods into transit-oriented developments that offer diversity in housing opportunities. Diverse housing types would be spread throughout the area. More affordable housing would be provided than current legislation dictates.
- Benefits: safety, improves environmental health, improves the deficit in the understanding of who is in society (promotes awareness).
- Groups benefiting: seniors, lower socioeconomic status groups, youth, families, "perceived undesirables," those with mental health issues.
- Related projects: Housing First, Habitat for Humanity's Strathern (Edmonton neighbourhood) project, Canmore's perpetual affordability policy.
- Opponents: NIMBY (not in my backyard) thinkers, builders, developers, those who manipulate the market.
- Challenges: could be hard to keep it going, could end up with vacant land if no one is interested in developing it, need to prevent project from becoming a self-fulfilling prophecy (becoming a ghetto just because it includes social housing).
- Would market it as diversity in housing rather than as social housing, which people don't want to live near.

### **3 SUMMARY AND CONCLUSION**

This workshop was aimed at launching discussions about the implications of transportation policies for the development or maintenance of health inequalities, an issue for which there is no obvious or easy solution and which is often deemed controversial. The first objective of the workshop was to develop a collective understanding of health inequalities produced by transportation policies. The workshop's second objective was to develop pathways to solutions that could mitigate or reduce the unequal effects of the policies in question, taking into consideration the political feasibility of such solutions within the Edmonton area, the local mix of actors, coalitions and government rationales. Among other things, the discussions generated by the workshop brought to light the multiplicity of possible ways of framing the issue of transportation and health inequalities, as well as the impact of such framing on the various policy solutions envisioned for addressing health inequalities linked to transportation.

## **APPENDIX A**

### **DISCUSSION GUIDE 1 – MAPPING THE PROBLEMS: A DISCUSSION GUIDE**

**DISCUSSION GUIDE 1 – MAPPING THE PROBLEMS: A DISCUSSION GUIDE**

<p><b>Health outcomes</b> (e.g. Respiratory diseases)</p>	<p><b>Determinants</b> (e.g. Air pollution)</p>	<p><b>The disadvantaged group(s) and the comparison point</b> (e.g. living within 200 m of a major road – i.e. 30 000 or more cars or trucks/day- /neighbourhood average)</p>	<p><b>How are transportation or transportation-related policies involved?</b> (e.g. zoning allows for residences within these distances of major roads – or traffic is channelled to specific roads trough widening of these)</p>



## **APPENDIX B**

### **DISCUSSION GUIDE 2 – IMAGINING RESOLUTIONS I: A DISCUSSION GUIDE TO BASIC STRATEGY ASSESSMENT**

**DISCUSSION GUIDE 2 – IMAGINING RESOLUTIONS I: A DISCUSSION GUIDE TO BASIC STRATEGY ASSESSMENT**

Second column: what health inequalities and what determinants are targeted by the proposed strategy?

Third column: what groups can benefit from the proposed strategy (can often be framed in many ways)?

Fourth column: what are the potential benefits of the proposed strategy (in terms of outcomes and significance of effects)?

Fifth column: what are the potential unwanted consequences of the proposed strategy (in terms of outcomes and significance)?

<p><b>Strategy</b> (e.g. traffic calming strategy of low SES neighbourhoods and then average)</p>	<p><b>Inequalities and determinants</b> (e.g. Injuries and deaths from land-transport via actions on volumes and speed of automobiles; respiratory and chronic disease and mental health (?) via actions on volumes of automobiles and air pollution and noise)</p>	<p><b>Groups benefiting</b> (e.g. low SES groups and then average; elderly and children – or people with specific mobility needs; pedestrians and cyclists)</p>	<p><b>Potential benefits</b> (e.g. significant reduction in injuries and deaths; less noise and air pollution; active transport more attractive)</p>	<p><b>Potential unwanted consequences</b> (e.g. If the is process difficult it could lead to community tensions; if the strategy is non-systematic, it could simply move the automobiles on other streets)</p>

## **APPENDIX C**

### **DISCUSSION GUIDE 3 – IMAGINING RESOLUTIONS II: A DISCUSSION GUIDE TO ASSESS POLITICAL FEASIBILITY**

**DISCUSSION GUIDE 3 – IMAGINING RESOLUTIONS II: A DISCUSSION GUIDE TO ASSESS POLITICAL FEASIBILITY**

Second column: how does the proposed strategy relate to the overall rationalities organizing transportation or transportation-related policies in Edmonton? How does it relate to the legitimized role of governmental authorities in acting on certain phenomena?

Third column: how does the proposed strategy relate to the objectives and time-frames embodied in actual or planned strategies or projects?

Fourth and fifth columns: who are the actors that could potentially be interested, neutral or opponents to the proposed strategy?

<b>Strategy</b> (e.g. Traffic calming strategy for low SES neighbourhoods)	<b>Political rationality</b> (e.g. Possible tension with support of more car km or with the idea that gov't should not impede car movement; could be said to be coherent with its legitimized role to improve life and economic conditions)	<b>Actual or planned strategies or projects</b> (e.g. Could be seen as coherent with existing strategies of revitalization of central zones)	<b>Potentially interested actors</b> (e.g. some transportation engineers might support; elderly advocacy groups; school directors and parent groups; some municipal elected officials could be seeing it as a way to improve the fiscal base)	<b>Potentially neutral actors or opponents</b> (some transportation engineers might oppose; some residents could oppose; some municipal elected officials might worry about costs or electorate's reaction)



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