

## ANALYSIS OF CLIMATE CHANGE ADAPTATION APPLIED TO MUNICIPAL POLICIES AND URBAN REALITIES AT THE NEIGHBOURHOOD SCALE: CASE STUDY OF MONTREAL



photo : <http://www.bing.com/maps>

### CONTEXT

Urban areas, which combine high population densities, multiple socioeconomic activities and their infrastructure, are highly vulnerable. The potential consequences, both social and economic, that climate change could have for cities should be on the agenda of every level of government. Indeed, new climate conditions, especially extreme weather events, can generate socioeconomic, sanitary or technical costs that will likely cause serious consequences for the most vulnerable populations.

Public policy developed in response to anticipated changes could facilitate adaptation, but it could also cause maladaptations that increase the vulnerability of city-dwellers and infrastructures.

### OBJECTIVES

The goal of this project is to improve our understanding of the processes that determine the way municipal policies issued from the central services are related to the urban realities at the neighbourhood scale, using Ville de Montréal and the Milton-Parc neighbourhood as a case in point. The study seeks to outline the cognitive, institutional and organizational factors that influence the decision-making process involved in implementing adaptation strategies and measures for climate change, and to provide information on existing barriers and opportunities. The project also aims to encourage municipalities to explicitly consider and integrate climate change adaptations in the development of municipal policies (also known as mainstreaming).

### APPROACH

In this study, the municipal policies to be analyzed include the Ville de Montréal's sustainable development strategic plan and its land use master plan as well as its detailed transportation plan. The researchers will also examine other documents, databases, and media coverage concerning extreme events (such as the heat wave of July 2010) and their consequences for the Montreal study area.

A survey questionnaire will be administered to Milton-Parc residents. Semi-structured interviews will be conducted with administrative and socioeconomic stakeholders involved in the neighbourhood or associated with central services and on the front lines at the Ville de Montréal. Individual interviews and focus groups will also take place with people selected based on criteria such as socioeconomic profile, position in targeted organizations, physical vulnerability to climate change impacts, etc. Collected data will be analyzed using qualitative and quantitative methods.

### EXPECTED RESULTS

In addition to the tools developed during this project (integrated databases, synthesis reports of the analyses, communication material for different audiences), the research team will recommend ways to mainstream measures to reduce climate change vulnerabilities into the making of public policy.

Program  
**BUILT ENVIRONMENT**

PROJECT STARTING DATE  
AND LENGTH  
February 2010 • 2 ½ years

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### IMPACT

The results of this project will contribute to a better understanding of the impacts public policy has on reducing or increasing vulnerability to climate change. The project is one of the first studies to explore how public policy can heighten awareness of adaptation to climate change and incorporate it into the decision-making processes at the neighbourhood level.

### FUNDING

