## Master's Report:

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An Examination of Car Sharing as an Environmentally Sustainable Transportation Alternative

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## **Executive Summary**

This Master's Report is submitted to fulfill the requirements for a Master's in Urban and Regional Planning at Queen's University in Kingston, Ontario. The subject is car sharing as a transportation alternative and is set within the broader context of environmentally sustainable transportation in Canada's urban areas. This emphasis on car sharing and environmentally sustainable transportation is significant as the proponents of the concept argue it represents a change in model away from the dominant 'own-car' model towards a new transportation concept that moves people around cities in more sustainable ways (Shaheen et al: 1999, p. 39).

This Report seeks answers to the following research question:

## Are Canadian car sharing projects / programs addressing environmentally sustainable transportation?

The evidence shows Canadian car sharing projects / programs address environmentally sustainable transportation issues, although on a limited basis, and can thereby reduce the emissions of greenhouse gases (GHG) into the environment. This is achieved through each of the following:

- reducing car travel and ownership, however it is acknowledged there is limited empirical evidence from Canadian examples;
- providing Canadians, including those who cannot afford their own vehicles, with convenient
  access to vehicles on an as-needed basis and thereby reducing the number of vehicles owned
  and operated by individuals. Canadians living in areas where car sharing is available to them
  can access vehicles on an as-needed basis without the cost of ownership, maintenance, and
  insurance;
- reducing excessive vehicle use through the economics of the pricing structure; and
- capturing the sustainable development market niche and the growth of mobility service companies.

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An opportunity exists for all levels of government, the private sector, and individuals to cooperate and affect change in terms of moving towards environmentally sustainable transportation in Canada's urban areas. The strategies need to include ways to enhance the availability of attractive alternatives to vehicles because, without these measures, individual Canadians will not be motivated to get out of them. These measures include enhancing urban transit, land use policies, and transportation demand management (TDM) policies like car sharing. These changes need to be made while at the same time considering the need to maintain competitiveness and future growth and development. Individual decisions and behavioral change, as well as the efforts of each level of government, are required to ensure success: "It is about being bold and being radical and being prepared to question all our prejudices and assumptions about the way accessibility and mobility work" (Whitelegg: 1999, p. 1).