Results of an Inquiry into the Methodologies, Methods, and Techniques Used to Make Decisions About Sustainable Transport Practices

FINAL REPORT

Transport Canada Project

Methodologies for Identifying and Ranking Sustainable Transport Practices in Urban Regions

Principal Investigator:

Barry Wellar, PhD, MCIP Professor Emeritus, University of Ottawa Principal, Wellar Consulting Inc. <u>wellarb@uottawa.ca</u> <u>http://www.wellarconsulting.com/</u>



Ottawa, Ontario January 31, 2009

1. Body of Work

The following tasks comprise the project's body of work.

Task 1 – Prepare a statement about the project and circulate for posting on websites and dissemination among associations, list serves, government agencies, and other means of informing experts and interested parties about opportunities to contribute to the research process and project documentation, and to participate as a member of the network of experts being assembled as part of the project.

Task 2 – By means of Internet searches and communications with experts and practitioners, ascertain whether precedent studies have been done, and, if so, reconcile that work with the work of this project.

Task 3 – Using the results of literature reviews and the suggestions of experts and practitioners, prioritize the pertinent bodies of literature, and conduct the literature search and review process to produce as representative a set of findings on methodologies for identifying and ranking sustainable transport practices in urban regions as resources (funds and time) permit.

Task 4 – Using the results of literature reviews and the suggestions of experts and practitioners, prepare a first approximation inventory of variables representing sustainable urban transport practices ranging from worst to best.

Task 5 – Prepare an interim report on findings about the state of the art/science of measuring sustainable transport practices in urban regions, and the variables representing worst-to-best sustainable transport practices in urban regions.

Task 6 – Prepare a final report that includes appendices of: 1) methodologies on measuring sustainable transport practices; 2) variables used to represent or identify sustainable transport practices in urban regions; 3) a bibliography of references used in the project; and 4) a list of contributors to this project who agree to be included in a list of resource people on the topic of "Methodologies for Identifying and Ranking Sustainable Transport Practices in Urban Regions".

2. Reports

Eleven reports were prepared over the course of the project. As per the agreement with Transport Canada, the reports have been posted to the Principal Investigator's website as a means of making the reports readily available to interested parties in Canada, as well as to members of the international community with an interest in the derivation and achievement of sustainable transport practices.

The reports examine the extent to which methodologies, methods, and techniques underlie decisions about identifying, adopting, and implementing sustainable transport practices, including those that are referred to as purported "best" practices.

As an advisory/reminder to Transport Canada and other parties, it is emphasized that there is a building block relationship among the elements of some tasks. That design feature means that if part of Task 6 is negated by work previously done during Task 3, for example, then the related, proposed piece of work in Task 6 is not pursued because it has already been discounted, found to be moot, or lacks the building block that enables me to find one way or another on a particular, follow-on matter.

In addition to conducting a series of keyword-based literature searches, and consulting with a number of experts and practitioners about the state of use of methodologies, methods, and techniques in municipal government decision making, the project undertook a survey of municipal governments to obtain contributions to a database on the methodologies, methods, and techniques that are used by municipal governments in Canada when making decisions about sustainable transport practices.

The titles of the eleven publications are listed in order of completion. The link to the Principal Investigator's website enables access to the reports.

Wellar, B. 2008. *Methodologies for Identifying and Ranking Sustainable Transport Practices in Urban Regions. Project Synopsis.* <u>http://www.wellar.ca/wellarconsulting/TCProjectSynopsis.pdf</u>

Wellar, B. 2008. *Groups and Individuals Contacted about the Sustainable Transport Methodologies.* Interim Report 1. <u>http://www.wellarconsulting.com/</u>

Wellar, B. 2008. *Background Comment on Methodologies, Methods, and Techniques to Support Decisions to Identify, Adopt, or Implement Sustainable Urban Transport Practices.* Interim Report 2. <u>http://www.wellarconsulting.com/</u>

Wellar, B. 2008. Survey of Municipal Governments about Methodologies, Methods, and Techniques Used to Make Sustainable Transport Decisions. Interim Report 3. <u>http://www.wellarconsulting.com/</u>

Wellar, B. 2008. *Methods and Techniques that <u>Could be Used</u> in Making Decisions about Identifying, Adopting, or Implementing Sustainable Transport Practices*. Research Report 1. <u>http://www.wellarconsulting.com/</u>

Wellar, B. 2008. *Results of Search for Prior Studies on Methodologies, Methods, and Techniques for Identifying and Ranking Sustainable Transport Practices in Urban Regions.* Interim Report 4. <u>http://www.wellarconsulting.com/</u>

Wellar, B. 2008. *Preliminary Report, Commentaries on Methods and Techniques that <u>Could</u> <u>be Used</u> in Making Decisions about Identifying, Adopting, or Implementing Sustainable <i>Transport Practices.* Research Report 2. <u>http://www.wellarconsulting.com/</u>

Wellar, B. 2008. *Limitations to the Literature on Methodologies for Identifying and Ranking Sustainable Transport Practices in Urban Regions.* Interim Report 5. <u>http://www.wellarconsulting.com/</u>

Wellar, B. 2009. Sampler of Commentaries on Methods and Techniques that <u>Could be Used</u> in Making Decisions about Identifying, Adopting, or Implementing Sustainable Transport Practices. Research Report 3. <u>http://www.wellarconsulting.com/</u>

Wellar, B. 2009. *Municipal Government Responses to the Survey about Methodologies, Methods, and Techniques that <u>Are Used</u> to Make Decisions about Sustainable Transport Practices.* Interim Report 6. <u>http://www.wellarconsulting.com/</u>

Wellar, B. 2009. Results of an Inquiry into the Methodologies, Methods, and Techniques Used to Make Decisions About Sustainable Transport Practices. Final Report. <u>http://www.wellarconsulting.com/</u>

The closing comment is that the reports parallel the work of the project tasks, and it is recommended that they be read in the order in which they are listed above.

Acknowledgements

Two individuals provided major assistance in readying the reports for publication. Sam Herold is a graduate student, Department of Geography, University of Ottawa. He did an outstanding job of transforming numerous pages of text and rough tables into well-formatted publications, and then posting them to the Principal Investigator's website. Marjorie Wellar edited the reports, making many improvements to what was written, and sparing the reader the agony of suffering through a variety of typographical errors. Any errors that readers may encounter are totally my responsibility.

The third acknowledgement recognizes the insight and the encouragement that was provided to this project by an extraordinary researcher who promptly, courteously, and thoughtfully replied to every communication sent his way. Dr. William Garrison is Professor Emeritus, Department of Civil and Environmental Engineering, University of California at Berkeley. Dr. Garrison was one of my professors at Northwestern University about 40 years ago, and he introduced me to the challenges of original research through a project investigating the issue of measuring generated, induced, and diverted traffic. Over the intervening years he continued to play the role of thought-provoker, with emphasis on thinking "outside the box".

The task of designing of this project, with its regard for research matters that have already been explored and confirmed, while also thinking about new and different research issues, challenges, and opportunities, was greatly facilitated by his sound advice. It is therefore a pleasure and a privilege to recognize the contributions that Dr. Garrison made directly and indirectly to the project and the associated reports.

However, I alone am responsible for any research design or other research deficiencies.