: Methodologies for Identifying and Ranking Sustainable Transport Practices in Urban Regions

Outline of Project
Urban Transportation Programs
Environmental Initiatives
Transport Canada

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The project, Methodologies for Identifying and Ranking Sustainable Transport Practices in Urban Regions has been approved, and this outline is an element of Task 1 (See part 3 below, Approach and Methodology). The outline provides context for the project, indicates the scope and direction of the research and development activities to be undertaken, summarizes the research design of the body of work, and lists the project deliverables.

1. PROJECT UNDERSTANDING

The Terms of Reference statement explains in detail the context and purpose of the work to be completed. To encapsulate, I understand that Transport Canada wishes to address an issue that arose during the early stages implementation planning in regard to the Urban Transportation Showcase Program (UTSP). That is, Transport Canada legal services suggested that there were implications associated with the agency identifying and publicly proclaiming certain projects as “best practices”. At that time, dealing with those implications, and designing a system to rigorously identify best practices, was beyond the abilities of program staff and resources. As a result, rather than pursue the best practices aspect, the program focused on highlighting “innovative” and “successful” practices to reduce urban GHG emissions.

Now that the USTP is in the final year, Transport Canada would like to revisit the concept of “best practices” to help understand the impact of the UTSP, and to contribute to designing a rigorous system that the Department may wish to use in the assessment and ranking of practices to make urban passenger transportation systems more sustainable. This work would inform ongoing policy and program discussions and developments, but it would not be sufficiently tested and refined for Transport Canada to use the proposed research on methodologies to publicly rank best practices. However, to promote understanding and discussion of this important topic, findings about methodologies for identifying and ranking best practices will be made available on the Transport Canada web site as a tool that urban transportation practitioners can use to assist in assessing project ideas and potential results.

This work entails several inter-related elements:

- A comprehensive literature search and review of the state of the art/science in the design and application of methodologies for identifying and ranking sustainable transport practices in urban regions.

  The literature search and review will be international in scope, and although additional literatures may be examined over the course of the project, the bodies of literature that appear most pertinent at this time are: the learned literature (journals and proceedings), professional literature (transportation, planning, engineering), interest group literature (public and vested for all modes of transport), popular literature (newspapers, magazines, newsletters, television and radio), and, in order to tap as many sources as finances and time permit, a keyword-based search of Internet websites.

- Consultation with experts and practitioners on the strengths and weaknesses of current methodologies for identifying and ranking or prioritizing sustainable transport practices in urban regions. This part of the project will commence with email and telephone communications, and will include presentations and discussions at professional meetings, academic seminars, community-based workshops, and other venues in which experts on methodologies for identifying and ranking or prioritizing sustainable transport practices are assembled.

  In addition to the six experts I have already consulted, I will meet with at least 20 experts at the Congress in Chicago to explore ideas, receive feedback on the design of the work, and obtain information on most likely candidate cities for discussions, and I expect to make contact with at least 100 experts by the end of September. I will enter into deep discussions with six or eight, and maybe as many as ten experts when the project moves into the analysis-synthesis phase which I plan to begin in October.

- Development of a network of individuals with an interest in further assessing and extending the state of the art/science on methodologies used in identifying and ranking or prioritizing sustainable transport practices in general, and best practices in particular.

- Development of a summary list of the variables/criteria used/considered in the identification of sustainable urban transportation best practices.

2. KEY ISSUES TO BE ADDRESSSED

The partial list of issues is indicative of the project's scope and direction, and of the methodological concerns associated with the derivation of 'best practices'.

- Establishing whether precedent inquiries similar to or related to this study have been done, and relate any such inquiries to the specifics of this project.

- Consulting with experts and practitioners to prioritize the literatures to be searched and reviewed.

- For context and orientation purposes, developing a framework for organizing the inventory of methodologies used to identify and rank sustainable transport practices, with emphasis on the structures, functions and operational strengths and limitations of high-end methodologies such as indexes.

- Combining the results of literature searches and feedback from experts/practitioners on procedures for rating methodologies that most effectively differentiate between sustainable transport practices. A matter of central interest is locating any organization that has undertaken a level of methodological sophistication which uses a hierarchy of terms such as worst-worse-bad-neutral-good-better-best to classify practices, and which has documented how the classification system assigns practices to classes.

- Designing an algorithm to optimize the keyword-based search and review procedure that will be applied to Internet websites.

- Creating decision rules for listing and associating the variables in methodologies which identify and rank or prioritize sustainable transport practices.

- Designing a template for structuring consultations with experts about prioritizing criteria to use in ranking transport practices in regard to sustainability.

- Selecting a limited number of agencies for interviews on sustainable transport practices that have been identified, adopted, implemented.

- Comparing the results of interviews with experts and practitioners with the results of the literature searches and reviews, and synthesizing the similarities and differences to provide an assessment of the state of the art/science in the design and application of methodologies for identifying and ranking sustainable transport practices, and best practices in particular, in urban regions.

3. APPROACH AND METHODOLOGY

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".

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