



TRANSPORT ACTION CANADA COMPENDIUM OF TRANSPORTATION RESEARCH TOPICS: A NEW APPROACH FOR NEW THINKING

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Compendium Purpose: To provide Transport Action members from across Canada a focal point for submitting and examining ideas and suggestions about research topics involving the conventional transport modes, that is, air, bus, cycling, light rail, private motor vehicle, rail, walking, and water transport for people, and air, private motor vehicle, pipeline, rail, and water for freight. In addition, the Compendium will provide a focal point that receives and presents ideas and suggestions for research on the role of telecommuting (for work, shopping, etc), in Canada's transportation future.

The ideas and suggestions will be posted online (<http://www.transport-action.ca/en/index.html>) and, as a result, contributions will be quickly, readily, and widely available as topics for class projects, course assignments, theses, dissertations, media stories, government and business projects, research proposals, etc.

This paper outlines how the proposed Compendium serves the Transport Action mission statement, and provides preliminary remarks about several key terms of reference for contributing to and accessing the proposed Compendium.

A. Background

My experience as Distinguished Research Fellow at Transport Action brings me into contact on a daily basis with individuals and organizations requesting information about, or commenting on, research that has been done or needs to be done on numerous transportation situations, issues, concerns, problems, opportunities, and challenges.

In addition, I also have regular exchanges with individuals in universities, government, and business who are concerned about the limited availability of researchers (theoretical and applied) competent to address the diverse transportation questions which are already confronting all regions of Canada, and which seem likely to become more difficult to resolve or reconcile in the coming decade and decades.

And, finally, I frequently encounter media items and list serve exchanges which to my mind would benefit greatly from having been filtered through a body of substantive research. That is, while journalists and others might be more comfortable with the 'anatomical sourcing' mode of producing opinions, it is my experience that using research derived by methodologically-based decision processes invariably tends to make for more informed discussions of non-trivial matters. (For a discussion of 'anatomical sourcing' and other methods and techniques of decision-making, see [Sampler of Commentaries on Methods and Techniques that Could be Used in Making Decisions about Identifying, Adopting, or Implementing Sustainable Transport Practices](#) (Wellar, 2009).

The decision to propose creating the Transportation Research Topics Compendium is based in part, therefore, on the contribution which I believe the Compendium can make to address the three considerations noted above.

Simply put, **it appears abundantly clear that Canada is in a serious transportation research shortfall, and the Compendium could play an important role in closing the significant and growing gap between transportation research demand and transportation research supply.**

Further, it also appears abundantly clear Transport Action (Canada) occupies a singular place among Canada's transportation organizations.

That is, Transport Action is arguably the only "grass roots" transportation advocacy group in the country with a multimodal, national activity agenda. As a result, by creating the Compendium Transport Action would provide individuals and organizations from across the country a focal point for submitting and examining ideas and suggestions about transportation research topics in any of the transport modes: that is, air, bus, cycling, light rail, private motor vehicle, rail, walking, and water transport for people; air, private motor vehicle, pipeline, rail, and water for freight; and, telecommuting which emphasizes data transmission as an alternative to the transport of people and goods.

B. About Transport Action

The proposed Transport Action Canada Compendium of Transportation Research Topics draws on my experiences as Distinguished Research Fellow. And, it also takes into account my belief that Transport Action occupies a singular and important place as Canada's only "grass roots" transportation advocacy group with a multimodal activity agenda.

It is therefore appropriate to present a selection of paragraphs that are based directly on materials from the organization's website. It is noted that several statements are modified or added in order to connect this initial description of the proposed (new) Compendium to the posted Transport Action materials (<http://www.transport-action.ca/en/about.html>).

Transport Action believes that transportation is more than just a means of moving goods and people, measured only by profits or political benefits. Transport Action believes that public transportation impacts on land use, economic development and the quality of life. Transportation is a tool to protect the environment, conserve energy, diminish land pressures, curtail the growth of road and highway spending and promote economic growth.

Transportation also determines accessibility to housing, education, health services, employment and leisure. Some groups are affected more than others by the availability and quality of public transportation: the poor, the disabled, seniors, youth, the unemployed, and those who live in rural and remote areas.

Transport Action represents the interests of consumers or users of public transport services in Canada, and is involved with a variety of transport issues including:

- the development of rail passenger services in Canada;
- the future of inter-city bus services;
- urban and commuter transit systems;
- the implications to consumers of the deregulated airline industry in Canada;
- the role of marine and coastal services;
- the effects of and alternatives to rail branch line abandonments;
- the role of government regulation in all public transportation;
- the impact on the public interest of demands for new highway spending;
- the safety of air, rail, and other public carriers;
- the promotion of intermodal links to improve the accessibility and cost-efficiency of public transport;
- increasing the safety, comfort and convenience of pedestrians;
- improving cycling facilities and services;
- increasing the sustainability of passenger and freight transport modes;
- designing and testing new methods and techniques of measuring transport system performance;
- evaluating the methods and techniques used by provincial and municipal governments to identify, adopt, and implement transport decisions;
- investigating the contribution of telecommuting to Canada's transportation future.

The next section briefly outlines how Transport Action engages in, supports, and promotes theoretical and applied research involving these and other issues. Again, it is noted that several statements are modified or new ones are added in order to connect the proposed Compendium to the posted Transport Action materials (<http://www.transport-action.ca/en/issues.htm>).

C. Transport Action Issues and Research

Energy. Transportation is the largest single user of energy in Canada. The oil shortages of the seventies and early eighties proved that our supply of fossil fuels is far from secure. Transport Action supports and promotes investigations into ways and means of reducing energy consumption by the transport sector.

Regulation. Changing economic and political goals have resulted in a significant reduction in the role of government regulation in transport planning and operations. Transport Action monitors the impact on communities, users, and assists these groups as they prepare their responses to changes such as rail line abandonments, loss of air service, and increased highway use.

Accessibility. Many groups rely on public transportation because they either cannot or choose not to invest in private transport, such as the automobile. Transport Action defends the right of the disabled, the young, and the elderly, those who are economically handicapped, and those who live in rural or remote areas.

Intermodal Cooperation. Transport Action encourages intermodal cooperation. Coordinating transport services so that they complement rather than compete with each other is the norm in many countries. This practice seeks out the most frequent and convenient transport connections while reducing operating costs. Transport Action undertakes and promotes research into how Canada can benefit from lessons learned about transport cooperation in other countries.

Environment. Transportation, as a significant consumer of fossil fuels, is responsible for much of the air-borne pollution, noise, and congestion in our cities and towns. Transport Action promotes the increased use of transport modes – walking, cycling, and transit – which cause the least damage to our atmosphere and quality of life. In addition, highway and roads have claimed enormous amounts of valuable and even irreplaceable natural habitat, agricultural, residential, and recreational land. Transport Action promotes research into ways and means of protecting the environment from the negative consequences of private motor vehicle – oriented transportation system expansions and uses.

Safety. Public safety is of paramount importance to all forms of transport. Transport Action's objective is improved safety standards in all modes. Transport Action encourages all agencies with responsibility for transportation facilities and services to place emphasis on ensuring superior safety performance, and through its reports and presentations is a leader in promoting public awareness about the political, social, legal, and other aspects of safety-related duty of care and standard of care obligations for all modes of transportation.

Consumer Advocacy. Transport Action represents consumers and relays their complaints and requests to carriers, the media, and public agencies. Transport Action also assists groups and communities in the development of applications and interventions before various regulatory bodies.

Research. Transport Action undertakes original research on matters related to users of public transport services. Major research papers are made available to the public and relevant agencies. Research is also undertaken under contract for other organizations. The Transportation Research Topics Program is designed to broaden and deepen participation in transportation research activities across Canada by providing ideas and suggestions for students, researchers, advocates, government agencies, consultants, businesses, and other interested parties.

Sustainability. Transport Action publishes reports on ways and means to achieve transportation and land use planning and development best practices that reduce resource consumption and environmental impacts. A multi-objective strategy of increasing the share of walking, cycling and transit trips and reducing private motor vehicle trips, and increasing the share of freight moved by rail, is employed. Transport Action also promotes research into ways of measuring sustainable transportation system performance, and into evaluating the methods and techniques that are used in making decisions to identify, adopt, and implement sustainable transport practices.

Public Hearings. Transport Action and its regional associations appear before federal, provincial and municipal regulatory agency hearings to defend the public interest in matters related to service changes or rail abandonments, applications for new services, fare increases, complaints about carriers, and other transport-related matters of public interest.

D. Transport Action Members as Sources of Ideas and Suggestions for Class Projects, Course Assignments, Theses, Dissertations, Government and Business Projects, Media Stories, and Research Proposals in Transportation

Members of Transport Action have local, regional, national, and international experience in designing, analysing, implementing, and evaluating transportation policies, plans, programs, and projects in all modes of transportation. In addition, they have supervised theses and dissertations at the masters and doctoral levels, they have taught at both the undergraduate and graduate levels, and have been principal investigators, researchers, and expert witnesses for projects sponsored by governments, businesses, and advocacy groups.

In the interests of promoting and improving transportation research in Canada, contributions to the Compendium by members of Transport Action will include transportation research questions, issues, problems, concerns, challenges, and opportunities that could be the basis of thesis, dissertation, projects, funding proposals, media stories, and other research initiatives.

Further, the research ideas, suggestions, statements of problem, etc., may range from a paragraph to a page or several pages in length, and could be general or specific, theoretical or empirical, local or national, etc., in nature. An example of a contribution to the Compendium is presented on page 8.

E. Interacting with Contributors to the Compendium

Many if not most members of Transport Action are already highly active in their careers in government, academia, business, advocacy and other fields, or as volunteers. As a result, some members may wish to limit their involvement in the Transportation Research Topics program to contributing statements of research ideas and suggestions to the Compendium.

And, on the other hand, there may be participants who are prepared to serve as information sources, or sounding boards, on committees, on project teams, etc., for their own contributions, and maybe even other contributions.

The point of emphasis, therefore, is that the Compendium activity will be designed to ensure that members who contribute research ideas and suggestions to the Compendium will be able to set their own involvement levels.

F. Guide to Compendium Entries

To assist visitors to the **Compendium**, each contribution will be accompanied by the name of the contributor of the item, information about how to reference the item, and the email address of the contributor if he or she is agreeable to being contacted about the contribution.

G. Rules of Attribution

Given the professional credentials of many Transport Action members, it will be explicitly noted and emphasized that rules of professional attribution apply.

That is, entries in the Compendium which are source materials for theses, dissertations, term papers, course assignments, research proposals, research projects, submissions to agencies, media stories, etc., are to be properly acknowledged. Attribution details will accompany each contribution.

H. Next Steps

Reports on Compendium progress will be posted from time-to-time on the Transport Action website, and will be circulated via the Transport Action Hotline (<http://www.transport-action.ca/Hotlines/hl101126.htm>)

Members of Transport Action are requested to think about their potential contributions to the Compendium, as well as about potential sources of financial support to assist with implementing and maintaining the **Transport Action Canada Compendium of Transportation Research Topics.**

To assist in the preparation of contributions to the proposed Compendium, and to illustrate how the contributions could be posted on the Transport Action Canada website, a suggested research topic statement follows.

No doubt there will be refinements along the way, with emphasis on making it easy for contributors to participate, but it appears that the materials in the illustrative research topic statement provide a good indication of what is likely to be involved in submitting contributions to the Compendium.

In closing, it is again emphasized that the amount of detail provided for a statement is a matter to be decided by each contributor. However, based on my experience in several different kinds of research environments, there is much to be said for “one-pagers” that identify and briefly justify the topic, but do not explain how to do the research. The one-pager that follows is indicative of what I have in mind.

Transport Action Canada
Compendium of Transportation Research Topics: Wellar

Research Topic: Methods and Techniques that *Could be Used* in
Making Decisions about Identifying, Adopting, or Implementing
Sustainable Transport Practices

Three reports on this topic were prepared as part of the project, **Methodologies for Identifying and Ranking Sustainable Transport Practices in Urban Regions**, that was undertaken for Transport Canada in 2008 and 2009.

Research Report 1 lists 24 disciplines and academic programs which contribute to the body of methods and techniques that *could be used* in making decisions about identifying, adopting, and implementing sustainable transport practices.

Based on the results of literature searches, surveys, and consultations with international experts and practitioners, Research Reports 2 and 3 present an illustrative selection of 42 decision-making methods and techniques that *could be used* in making decisions about identifying, adopting, and implementing sustainable transport practices. Reports 2 and 3 also provide non-technical commentaries on twenty methods and techniques as a means of introducing elected officials and citizens to some of the many methodologically-based ways there are that *could be used* to help make decisions.

Additional literature searches, surveys, consultations, and commentaries could significantly increase the number, variety, and understanding of methods and techniques pertinent to decision-making in this domain, and thereby provide an expanded context for theoretical and applied research into the methods and techniques that are used and should be used in decisions to identify, adopt, and implement sustainable transport practices. Research Reports 1, 2, and 3 provide detailed suggestions about such follow-on research projects.

ATTRIBUTION AND CONTACT DETAILS

Contributor: Barry Wellar. Email:

Source: **Transport Action Canada Compendium of Transportation Research Topics.** (Link to be added when Compendium implemented)

Reference: Barry Wellar, 2010. Research Topic: Methods and Techniques that *Could be Used* in Making Decisions about Identifying, Adopting, or Implementing Sustainable Transport Practices. (Link to be added when Compendium posted)

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