



Transportation Day Websites Geography Awareness Week 2007 Canadian Association of Geographers

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On a daily basis the media in Canada publish articles that discuss policies, programs, plans, concerns, issues, problems, etc., involving Canada's national, regional, and urban transportation systems. There were two developments in recent years, however, that should cause Canadians to want to know a lot more about the connection between geography and transportation, and how that connection is likely to affect Canada's economic, social, and environmental condition for decades to come.

First, the Environment Commissioner of Canada reported that the transportation sector is this country's second worst contributor to greenhouse gases, and hence to climate change. What Canadians should be asking, therefore, is that if the output of greenhouse gases must be reduced, how will the transportation sector respond, and how will that response affect the movement of people and freight at the national, regional, and local scales, bearing in mind that local applies to trips made to work, malls and shopping centres, big box stores, schools, arenas, drive-ins, theatres, restaurants, golf courses, parks, etc.

Second, although the idea of sustainable transport has its roots in research and reports that date back to the 1970s, and there has been much discussion of sustainable transport principles over that time, very little effort was put into achieving sustainable transport practices. However, growing concerns about climate change, pollution, fossil fuel shortages, urban sprawl, obesity, costs of highway infrastructure, loss of lands to roads and parking lots, and numerous other concerns are now the basis of a growing movement across Canada to actually put sustainable transport principles into practice.

At a very general level, this means that the share of trips made by private motor vehicle will decrease, and the share of trips by walking, cycling and transit will increase; more freight will move by rail and less by truck; and more people will travel by rail rather than by air for short trips. These kinds of changes have profound implications for Canada's transportation geography, as well as for other fields of the discipline including urban



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geography, economic geography, political geography, recreation geography, and industrial geography.

I believe that we have identified a selection of websites that do an excellent job of demonstrating and discussing how geography and geographical considerations affect various aspects of transportation. By way of illustration, geography affects where modes are located, which modes are preferred for which people- and freight-moving purposes, how much they are used for which transportation purposes, how well the modes are interconnected, how proximity and accessibility affect usage, how geographical factors affect land use and mode connections, and so on.

Clearly, there is a great deal of ground to cover when it comes to understanding the geography-transportation connection, but these websites provide a running start on reading about a fascinating aspect of geography.

It is appropriate at this point to thank Transport 2000 Canada for its assistance in providing an illustration of how to set up a webpage for Transportation Day purposes. As shown by the Transport 2000 Canada 'model' (transport2000.ca), a page of text discusses the connection between geography and transportation, and then provides a list of published works that demonstrate the geography-transportation connection.

My closing comment is saved for the GIS-Transportation Poster Competition. I am very pleased that Transport 2000 Canada agreed to host the GIS-Transportation Poster Competition, assisted by the Lab for Applied Geomatics and Geographic Information Systems Science, University of Ottawa, which will make the posters available for viewing on or about November 19 at: laggiss@gmail.com

This is a new venture for Geography Awareness Week, and one which could set a precedent for similar poster competitions linking GIS and other topics of interest. Readers not familiar with poster competitions may find the following brief description instructive.

Transportation must be the primary subject matter. The focus of the poster may be on walking, cycling, transit (bus, rail), auto, trucking, heavy rail, pipeline, air, water, or telecommuting, on passenger travel and/or freight movement, or a combination of modes. The primary evaluation criteria are the extent to which the poster:

1. Integrates qualitative, quantitative and visualization techniques;
2. Demonstrates design and analysis and/or synthesis skills;



3. Employs elements of spatial logic and relations;
4. Explains how geographic information systems and/or geographic information system science contribute(s) to poster content and design.

Selected Transportation Websites Transportation Day 2007

Better Environmentally Sustainable Transportation (B.E.S.T.)

www.best.bc.ca

There are a number of 'grassroots' organizations in communities across Canada that actively support alternative transportation strategies and actions. Their common objectives include informing people about the environmental, health and community issues surrounding transportation, and motivating people to increase the number of trips they make by walking, cycling, carpool, and public transit, and reduce the number of trips by private motor vehicle.

BEST is an excellent example of an organization that has encountered many of the connections between geography and the walk, cycle, and public transit modes of transport, and has been engaged in this issue for almost two decades in the Lower Mainland of British Columbia. It provides a very good introduction to this field for anyone wanting to know more or do more about achieving environmentally sustainable transport.

Canadian Urban Transit Association www.cutaactu.on.ca/en/home

Transit systems, including buses, light rail, and heavy rail move people within urban areas and between urban areas in municipalities across Canada. For individuals who do not have access to a private motor vehicle, transit is their means of mobility when a trip cannot be made by walking or cycling. For others, they prefer to take transit rather than drive for reasons related to environmental concerns, costs, traffic-related stress, safety, weather conditions, and so on.

As transit users are very aware, geographic factors fit into their decisions to use transit, live near transit lines, work near transit lines, and take transit to school, parks, arenas, etc. Geographic factors of particular interest in the geography-transit relationship include distance, accessibility, location, connectivity (inter-lining), and mobility. The extent to which these factors are satisfied has a direct bearing on who uses transit, how often they use transit, for what purposes.



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In addition, however, these geographic factors are directly relevant to decisions about where to locate new transit services, how to better assign existing services, and how to achieve sustainable transport best practices by integrating transit services and land use planning and development.

The Canadian Urban Transit Association represents the public transit community in Canada and engages in a multitude of activities including conferences, training, public affairs, technical services, research, statistics, government relations and transit planning. This website provides information on current and future efforts by CUTA to demonstrate how geographical factors are taken into account as part of CUTA's mission to establish public transit as the primary solution to urban mobility in the achievement of sustainable transportation.

Capital Bike & Walk Society (Victoria, BC)

<http://www.capitalbikeandwalk.org>

People who walk directly experience a changing geography at every step, and people who cycle directly experience a changing geography at every turn of the wheel. In addition, people who walk and cycle are acutely aware if there is not enough geography separating them and other walkers and cyclists, and especially if there is not enough geography between them and other people in cars, minivans, SUVs, trucks, buses, and streetcars. As a result, an understanding of how geographical factors affect transportation system performance is very important to the success of walking and cycling advocacy organizations, and to the walkers and cyclists represented by these organizations.

The mission of the Capital Bike and Walk Society (CBWS) in Victoria is to provide expert advice on infrastructure, programs and strategies to support the choice for cycling and walking. Its activities in support of the mission include workshops on walking and cycling, and audits and analysis of the walking and cycling environment in the Capital Region. Visitors to this website will learn about a number of issues and initiatives connecting geography and the walk and bike modes of transportation in Victoria and the Capital region of BC.

Centre for Sustainable Transportation <http://cst.uwinnipeg.ca/>

The Centre for Sustainable Transportation (CST) website is a good fit for Transportation Day and Geography Awareness Week for several reasons. First, examining CST materials provides an opportunity for assessing progress in building geographic considerations into sustainability principles and, even more importantly as time goes on, into sustainability practices. Second, as a sustainable transportation research and policy organization, CST is an important



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organization for all Canadians, including university, college, and high school students in various disciplines and with various interests who want to learn more about the what's, why's and how's of transportation policy research in Canada. And, third, as a policy research organization, CST would no doubt have an open ear for viewers of the CST webpage who have an idea or two about geography-based issues that would benefit from study by the Centre.

City of London www.london.ca

With more than 80 per cent of its population in urban areas, and a high concentration of population in relatively few large, metro regions, Canada ranks as one of the most highly urbanized countries in the world. It is therefore appropriate to ensure that the website selection for Transportation Day includes a representative from the municipal level of government. It is noted without comment that while much attention is given to or taken by provincial and federal governments in the transportation field, the fact of the matter is that municipal governments are the ones with primary responsibility for providing the hard and soft services needed to move people and freight in urban areas.

The City of London is a good choice for this role for two reasons. First, in a recent survey of Canadian municipalities about their progress in identifying, adopting, and implementing sustainable transport practices, the City of London achieved one of the higher rankings. Second, while larger cities such as Toronto, Montreal, Vancouver, and Calgary have more expansive and more comprehensive transportation networks, services and plans, reading their materials might be too much for people simply wanting to know more about the geography-transportation connection.

London, on the other hand, offers a neat package that is easily found and easily read. Just click on Transportation and you encounter a number of entries that have 'geography' written all over them:

- [Carpooling](#) (The *Carpooling Zone* link contains very instructive content.)
- [Cycling](#)
 - [Bike lanes](#)
 - [London's Bicycle Master Plan](#)
- [Downtown parking](#)
- [London Transit Commission](#)
 - [Bus route maps & schedules](#)
- [Transportation planning](#)
 - [Traffic volume data](#)



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In addition, if you go to Community Reference you find Accessibility Plan and Transportation Master Plan, and under Neighbourhood and Property Matters are Lane Policies and Snow Clearing FAQs. All four entries include geographical factors, and in my experience a large number of Canadians could benefit from giving these website materials serious consideration.

City of Ottawa http://www.ottawa.ca/index_en.html

From an applied research perspective the transportation situation in The City of Ottawa is very “interesting”, that is, it is highly problematic, which makes it a thought-provoking choice for Transportation Day. In brief, Ottawa may be the only city in Canada that has hundreds of 18-wheelers clogging a number of major and minor downtown commercial streets five days a week; after years of debate the agonizing continues over whether and where to build a light rail transit line, whether and where to build a tunnel downtown, whether and where to build a bridge crossing the Ottawa River between Ottawa and Gatineau, and both daily and community newspapers likely carry more letters on transportation issues than any other substantive topic. Further, the City of Ottawa has also had and continues to have controversies involving the walk, cycle, and transit modes, and many of those problems are spatial in nature.

When I looked at this site on October 23 the Highlights listed items such as Don't make a grave mistake: Stop on red, and New idling by-law, both of which have geographic aspects, and if you click on Road Work and Road Closures you can link to Ottawa on the Move which takes you to links connecting you to Cycling, Driving, Future Plans, Transit, TravelWise, and Walking. There is a geography-transportation connection to all these modes, and it may be a useful exercise to look for explicit discussions along that line. As for TravelWise, it is quite the coincidence, but on November 9 I will be making a presentation at the National TravelWise Association Conference in Belfast, and I will mention the City of Ottawa in “Sustainable Transport: Can Anybody Here Win this Game?”

NEPTIS Foundation <http://www.neptis.org>

I was a graduate student at Northwestern University when I first encountered the term ‘second generation land use and transportation planning model’. For those unfamiliar with this terminology, first generation models planned land use and transportation systems independently of each other, and second generation models were intended to assist citizens, government officials, business corporations, the media and other interested parties understand the reasons, why's and how's of integrating the two processes. Forty years later second generation models are a core sustainable transport best practice, but in city after city and region after region across Canada the two systems tend to go their separate ways most of the time.



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The Neptis Foundation, one of the Transportation Day participants, has an abiding concern about the land use-transportation relationship. The organization is an “independent, privately-capitalized, charitable foundation that contributes timely, reliable knowledge and analysis on regional urban development to support informed public decisions and foster understanding of regional issues”. A recent Foundation publication of particular interest due to its regard for the geography–transportation connection and integration of land use and transportation systems is *The Neptis Foundation’s Commentary on the ‘Places to Grow’ Plan*. (<http://spacing.ca/votes/?p=507>)

Railway Association of Canada www.railcan.ca

Canadian railways date back to Confederation, and are an integral part of the transportation infrastructure for moving people and freight in most regions of the country. (Alas, the ‘Newfie Bullet’ is no more.). As a result of that widespread, geographical presence and the role of railways in shaping Canada’s political geography, transportation geography, regional geography, economic geography, urban geography, resource geography, industrial geography, and tourism geography, it is appropriate to include an organization with a railway focus among the featured Transportation Day websites.

The Railway Association of Canada (RAC) represents some 60 member freight, tourist, commuter, and intercity Canadian railways, and an important part of its mission is to conduct “... the research, policy development and advocacy necessary to lobby all levels of government and transportation-related businesses to promote rail’s advantages and ensure fair treatment among other modes.” The very effective website articulates how RAC is pursuing this task.

As the reader will no doubt observe, however, there are many elements in the RAC website in which geographical factors are implicitly considered. Or, perhaps, they are simply taken as givens; that is, it’s all geography so why bother with specifics. For the record, however, it is important to note that a review of website offerings reveals the presence of a number of key geographical concepts in research, policy, and advocacy statements, including access, borders, clustering, congestion, density, location and proximity.

To pick up on just the last term, proximity, the page containing Railway/Municipality Proximity Issues Information Base provides a number of very good reasons for Canadians in rural and urban areas to carefully examine the contents of this website, and especially for discussions that point towards an increased rail presence for moving both people and freight in order to achieve sustainable transport best practices. For more details, go to (<http://www.proximityissues.ca/english/index.cfm>).



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Region of Durham www.smartcommutedurham.ca and
Smart Commute Association of Greater Toronto and Hamilton
<http://smartcommute.ca/>

For reasons that can be traced back to at least the 1970s, numerous efforts have been made to identify ways that serve and promote the continued use of private motor vehicles for work, school, shopping, and other trips. Beyond the longstanding tradition of building and/or widening roads, initiatives in that regard included carpooling and the notion of so-called high-occupancy vehicle lanes. In both instances the actual or impending concern was that of increased congestion due to a combination of more vehicles on the road and less room or opportunity to increase capacity.

Today, with increased societal emphasis on achieving sustainable transport practices rather than just talking about them, many citizens, corporations, and governments are embracing what is known as “smart commute”. In the case of the Region of Durham, “*Smart Commute Durham*” helps local employers and commuters explore and promote different commuter choices, such as carpooling, teleworking, transit, cycling, walking or flexible work hours. The press release announces how Durham will proceed to implement Smart Commute, and it is clear that smart geography will be a major factor in implementing and maintaining the smart commute concept in Durham.

The Durham case is similar to that of other municipalities involved in the smart commute program of Transport Canada, and Durham is actually part of The Greater Toronto and Hamilton Smart Commute initiative. The full list of Smart Commutes under this umbrella is:

- [404-7 Markham, Richmond Hill](#)
- [Brampton- Caledon](#)
- [Central York](#)
- [Durham](#)
- [Halton](#)
- [Hamilton](#)
- [Mississauga](#)
- [North Toronto, Vaughan](#)
- [Toronto](#)

As the GTA-Hamilton website notes, “**You have options.** Walking or biking may be your way, providing the added benefits of scenery and exercise. Perhaps you find transit more economical, or that it simply saves you the hassle of driving, parking, and fighting your way through traffic? Maybe your solution to traffic



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congestion is to share the journey, and even the expense, by carpooling. The HOV lane might even get you there faster! There are many ways to get there.”

The key point, of course, is that while there is nothing new in the release, the sense is that we cannot continue to do what we have been doing in the commuting field, and that changes must occur. It is equally clear, however, that the success of Smart Commute over the long term depends on being much smarter about the geography involved in land use and transportation systems planning in the first place. The materials available at these websites provide a good indication of the geographic work done to date.

Transport 2000 Canada <http://www.transport2000.ca/>

As noted on the home page, Transport 2000 Canada “...promotes environmentally-sound transportation solutions and gets actively involved in a wide range of issues such as: public transportation, safety, accessibility, energy efficiency, protection of the environment, intermodal cooperation and government regulation.” Over the past year or so this organization published a large number of reports that explicitly discuss the geography-transportation connection, as well as a White Paper, conference presentations, and other documents assessing Canada’s progress in achieving sustainable transport best practices at the local to national scales. A selection of the materials that make the geography-transportation connection has been assembled for examination.

In addition to playing a major role in the launch of Transportation Day as part of Geography Awareness Week 2007, Transport 2000 is hosting the initial GIS-Transportation Poster Competition with the assistance of the Lab for Applied Geomatics and Geographic Information Systems Science, Department of Geography, University of Ottawa. Details about the competition are noted above and also posted at <http://www.transport2000.ca/> and laggiss@gmail.com.

As a closing note it appears fair to say that, at the present time, among the many transportation organizations, departments, and agencies across Canada, Transport 2000 is one of the few whose website pages explicitly state a regard for geographic considerations when addressing transportation issues, problems, choices, decisions, etc. Readers are therefore invited to examine the designated geography-transportation materials that can be accessed via links, and consider suggesting to other transportation organizations, departments and agencies that they too expend more thought and effort in explaining how geographic factors are incorporated in their transportation research, policies, programs, and plans, and especially in their transportation practices.