

Sustainable Transportation in Canadian Metropolitan Areas: Assessing the Mechanisms for Planning, Funding, and Implementation

Marianne Hatzopoulou¹ and Eric J. Miller, Ph.D.²

A paper submitted for presentation in the paper session:

Transit Plans and Planning: How They Support Sustainability

At the 2008 Annual Conference of the Transportation Association of Canada
Toronto, September 21-24, 2008

ABSTRACT

This paper assesses the extent to which strategic transportation plans and policies have succeeded at promoting elements of sustainable transportation in selected Canadian urban areas. The main hypothesis to be tested is whether the current prevalence of the “sustainability terminology” is merely an indication of the correct political jargon being adopted or a real sign that Canadian urban areas are becoming more sustainable. For this purpose, a review of existing official plans and transportation master plans in selected cities is initially conducted as a means of assisting in the development and implementation of a questionnaire-based survey. The survey is conducted with planners and policy makers at the three levels of government and it aims at capturing participants’ views on the existing mechanisms for appraisal, funding, and implementation of sustainable transport plans. The study confirms that while reviewed planning documents include sustainability objectives and propose strategies that can potentially improve the sustainability of transport, both funding and implementation have lagged behind. Interviewed participants have confirmed the disparity between political “wish lists” and actual funding for sustainable initiatives. This situation has led to a gloomy outlook towards the future of most Canadian urban areas on the part of most survey participants.

¹ **Corresponding Author.** Contact information:

Ph.D. candidate

Department of Civil Engineering

University of Toronto

35 St. George Street

Toronto ON M5S 1A4

Tel: 416-978-5049

Fax: 416-978-5054

E-mail: marianne.kazopoulo@utoronto.ca

² Professor Eric J. Miller, Department of Civil Engineering, University of Toronto.

INTRODUCTION

Sustainable transport planning, in its broadest sense, involves planning for the three main elements of sustainability namely, environmental preservation, social equity, and economic growth (1; 2; 3; 4; 5; 6). The environmental, economic, and social pressures exerted by population and economic growth in major urban areas worldwide have driven policy-makers to promote sustainable transportation and urban form as a means to achieve greenhouse gas reductions, reduce land consumption, improve air quality and public health, as well as enhance the overall welfare and quality of life of urban populations. In most metropolitan areas of the developed world, various policies following sustainable transport and “smart growth” principles have been developed to accommodate growing urban populations. A common denominator among the proposed policies is their multi-sectoral nature whereby their impacts extend beyond the transport sector itself to other sectors such as environment, health, and education. In Canada, metropolitan areas are no exception to the worldwide trend of developing master plans aimed at promoting sustainable transport and urban form as a response to the challenges brought by growth in population and travel demand. However, to date, an adequate framework for appraisal, funding, implementation, and monitoring of strategic transport plans is still lacking. Most policy appraisal occurs without the use of formal evaluation tools, but merely through discussions and professional judgement (7). It is therefore unclear whether any progress is being made towards more sustainable transportation patterns.

This paper assesses the extent to which sustainability objectives drive the planning and policy agenda in Canada and investigates whether policy appraisal and funding mechanisms actually reflect these objectives. The methodology adopted consists of three main elements: 1) selection of Canadian cities that are either major metropolitan areas or medium-sized cities that are expected to grow as a result of increasing immigration rates to Canada (8); 2) review of transport plans for the selected cities in terms of their potential for promoting sustainable transportation; and 3) conduct of a questionnaire-based survey with planners and policy-makers at the three levels of government and discussion on the existing status of funding and implementation of transport plans and of current means and objectives for appraisal of those plans.

Beside this introduction, the paper starts with the choice of Canadian cities that will be included in the survey and with a general discussion of selected transport plans in terms of their sustainability objectives. The following section provides a description of the survey methodology and participants/agencies. The fourth section captures the opinions of survey participants on sustainability as a concept and existing visions or definitions of sustainability within government agencies. In the fifth section, the existing status of funding and implementation of sustainable transport plans as portrayed by the respondents is discussed in order to test whether sustainable transportation remains as a vision or has been translated into plans that have received funding. Then, existing policy appraisal in terms of sustainability impacts is examined; again as a means of assessing whether sustainability objectives have changed the appraisal process. Finally, the results of a brief visioning exercise conducted with participants on the long-term future of transportation are discussed and used as a means of gauging the level of satisfaction of planners and policy-makers with the current situation and its potential evolution.

REVIEW OF SELECTED TRANSPORT PLANS

Canadian cities that are either major metropolitan areas or medium-sized cities that are expected to grow as a result of an increasing rate of immigration to Canada (8) were selected as part of this study. These areas are expected to have more pressure in terms of developing and implementing strategic growth plans and integrated transportation policies and therefore more exposure to the process of policy appraisal, implementation, and monitoring. The following cities were selected: Vancouver, British Columbia; Calgary, Alberta; Edmonton, Alberta; Montreal, Quebec; Quebec City, Quebec; Ottawa, Ontario; Waterloo-Kitchener, Ontario; and various regions within the Greater Toronto Area, Ontario as it is the fastest growing area in Canada in terms of population.

A literature review of various strategic growth plans, transportation master plans, and municipal official plans related to the selected urban areas was conducted (9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28). All of the selected cities have an official plan or growth strategy and a transportation master plan which includes a long range transportation vision. In terms of their overarching objectives, the plans reviewed are quite similar and have more or less the same goals of promoting economic growth, improving the environment and safety, reducing social disparities, and alleviating congestion. Parking management in downtown areas, the promotion of alternative modes of transportation (walking and cycling), and Transportation Demand Management (TDM) initiatives are also recurrent themes. Transit investments and an increase in transit share are considered as a priority in all transportation master plans. The City of Toronto official plan (9) makes a bold statement that no new roads will be built in Toronto and the increase in travel demand will be handled by transit. The Montreal transportation master plan (12) proposes to treat transit as a cornerstone of the development of the City of Montreal.

In terms of the evaluation of potential external impacts arising from the proposed transport plans; only a few of them suggest the development and use of evaluation measures. The Montreal transportation master plan (12) recommends the development of indicators for measuring 1) the reduction in automobile use, 2) environmental impacts, 3) safety, 4) public and private investments, 5) positive economic impact on the transport sector in Quebec, 6) direct transport costs, and 7) reduction in public costs. The plan does not mention how these indicators will be estimated. The Calgary transportation master plan (15) proposes the adoption of a “triple bottom line (TBL)” approach to decision making that considers economic, social and environmental issues. The plan however, falls short of articulating how economic, social, and environmental impacts will be estimated. The Edmonton transportation master plan (19), attempts to estimate the potential impacts of the plan on mobility, emissions, community impacts, and traffic noise. However, it is not clear how those impacts are quantified. While most plans start with a coherent set of objectives for achieving more sustainable transport patterns, and propose initiatives that are in line with reducing automobile use and promoting transit, walking, and cycling, they overlook the evaluation phase that is crucial in terms of assessing whether proposed initiatives can indeed achieve sustainability.

SURVEY DESIGN AND PARTICIPANTS

The review of plans described in the previous section, allowed for pinpointing the different agencies that have a role in transport planning and policy-making as well as relevant individuals that are senior enough to provide both a technical and a policy perspective. Selected individuals were contacted by email and invited to participate in the survey, a brief description of the survey and its goal were provided. A total of 35 individuals were contacted out of which four did not respond to the invitation and the rest were interviewed.

Survey content

The survey consisted of 27 interviews conducted between May and October 2006. Interviews were semi-structured and lasted for 1 to 1.5 hour. Most of the interviews were conducted with one participant while 4 interviews were conducted with 2 participants at the same time, thus amounting to a total of 31 participants.

The questionnaire is divided into three components and seven sections: **Component A:** 1) time frame for planning (Long-range vs. Short-Range planning); 2) existing modelling tools and role of models in decision-making; 3) involvement in modelling and decision-making; **Component B:** 4) assessment of external impacts of plans (environmental, economic, social) and sustainability planning; 5) foreseen business as usual future of transportation in the region; **Component C:** 6) major changes in policy environment witnessed in agency and region; 7) existing and desired institutional framework for integrated policy appraisal and decision-making. In addition to responses to the survey questions, background data on participants was collected including: position in agency, years spent in current position, educational background, and main responsibilities.

Sections 4 and 5 (**Component B**) are of most significance to the discussion on the extent to which sustainability objectives drive the planning and policy agenda and the level of satisfaction of planners and policy-makers with the current situation. Given this, their results are described in detail within this paper. Other survey sections are referred to as required; they are detailed in (7; 29).

Participants' profiles

The 27 interviews were distributed among the three levels of government (4 interviews at the federal level, 3 interviews at the provincial level, 13 interviews at the municipal / regional municipality level) and 7 interviews were within transit agencies. A total of 20 different agencies were surveyed. Beside the 4 interviews conducted at the federal level (Transport Canada, Natural resources Canada), the rest have a cross-country representation:

- **12 interviews in Ontario:** City of Ottawa, City of Markham, City of Toronto, Region of Waterloo, Region of York, Region of Peel, Region of Durham, Toronto Transit Commission, Ministry of Transport Ontario, Ministry of Public Infrastructure Renewal
- **6 interviews in Quebec:** Réseau de Transport de la Capitale, Agence Métropolitaine de Transport, Communauté Métropolitaine de Montreal, Ministry of Transport Quebec
- **2 interviews in British Columbia:** TransLink, Greater Vancouver Regional District
- **3 interviews in Alberta:** City of Edmonton, City of Calgary

Most surveyed departments were planning departments and most participants were either heads of departments or managers of transportation thus indicating a certain level of seniority within the survey sample. In addition to the occupied position, the number of years spent at the current position was recorded. Out of the 31 participants, 11 have been in their current position for more than 10 years while 12 have been in the current position for 6-10 years and 8 have been in the position for less than 6 years. Note that if this classification is made based on the years of experience, a significantly higher number of participants would be in the >10 years range since a large portion of “new directors” with less than 5 years in their current position, have had senior positions in other agencies or other departments within the same agency.

In terms of participants’ training, the three backgrounds encountered among the survey sample include, economics, engineering, and planning/geography. Federal level, participants are predominantly economists (3 economists, 1 engineer) while in municipalities, there is predominance of engineers (14 engineers, 3 planners). Transit agencies have a mix of planners/geographers and engineers with a prevalence of planners/geographers.

PREVALENCE OF SUSTAINABLE DEVELOPMENT TERMINOLOGY

In this section, opinions of participants regarding the concept of sustainability and its importance within their respective agencies are captured. In addition, the development of sustainable transport visions and definitions within long-range master plans or other planning documents is investigated. The aim of this section is to examine the extent to which planners and policy-makers are aware of the new challenges facing urban areas and their inclination to set long-term goals that would serve the objectives of urban sustainability.

Sustainability planning concept

Participants were probed as to their personal opinion with respect to the concept of sustainability, the specific question says: “How do you understand the concept of sustainability planning? What does it mean to you? What aspects do you think it engulfs?” Diverse responses were obtained ranging from those who acknowledge sustainability as the union of environmental preservation, economic growth, and social equity to those participants who simply state that it is an “important concept” (Table 1).

Beyond the three main pillars of sustainability that 6 out of 26 participants who addressed this question, recognize to be the main elements; transit and the provision of alternative transportation is considered by many as a significant component of sustainability. In fact, two participants identify sustainability as being achieved solely by promoting alternative transportation (***“Sustainability is all about options, giving people different transportation options not just the car”***). Another concept that was associated with sustainability is limiting sprawl; in fact, two participants believe that sustainability planning is all about limiting sprawl. Four participants mention that it is a “buzz word” and is nothing but another way of saying “planning responsibly and managing growth” (***“Sustainability is really a buzz word but the direction is very clear and there is no problem explaining its components”***). Finally, three participants failed to provide their own definition of sustainability and only mentioned that it is an “important concept”. Among all responses, environmental and resource preservation is the

mostly cited, followed by economic growth. Most participants recognize the environmental side to be very important but also many of them stress economic vitality as a major precursor for improved environmental quality through technological innovation and updating of environmental standards. While most of the respondents did not recognize the three facets of sustainability together, overall there is a good understanding of the concept and its ramifications on planning and policy. Responses were not found to differ among level of government, urban regions, or educational background and were randomly distributed among the survey sample.

Definitions and visions of sustainability / sustainable transport

Participants were asked whether they had a vision or definition of sustainability incorporated within their long-range plans. Among the 20 surveyed agencies, 3 have a formal definition of sustainable transportation, sustainability, or a sustainable development strategy; 6 have long-range visions that incorporate some or all elements of sustainable transportation; 2 have a smart-growth strategy (with more or less the same direction and components of a sustainable transportation strategy); and 9 have neither a vision nor a definition of sustainability. All transit agencies are included within this last category. This can be explained by the fact that transit agencies are more involved in short-range operational planning rather than long-range strategic planning, as discussed in (29). Federal agencies have had formal sustainable development strategies for at least the past 10 years. Most municipalities have broad visions with elements of smart growth or sustainable development within their long-range transportation master plans. Most agencies, including the ones that do not have formal definitions or visions, affirm looking at the different components of sustainability even if it is not used as a keyword. They claim that sustainability objectives drive most of their plans.

IMPLEMENTATION OF SUSTAINABLE TRANSPORT PLANS

The prevalence of sustainability visions, definitions, or objectives within long-range plans has only real significance if those plans are approved by decision-makers, funded, and fully or partially implemented. As such, it is important to compare “planning philosophies” with funding and implementation to be able to detect any real change. The questionnaire does not directly target funding and implementation. However, one of the sections (which was originally designed to capture major changes in the policy environment over the past 10-15 years) provides a good indication of planning vs. implementation in light of the discussion it set off.

In response to the question “Have you witnessed any major changes in policy evaluation and decision-making in your agency for as long as you have held the current position? If yes, which?” The first most frequently mentioned major change is the fact that decision-makers and the public are more sensitized and have a better understanding of sustainability, environmental issues, and the importance of transit and alternative modes. It seems that planners are sensing an emerging awareness within communities and decision-makers of transportation in general and road congestion in particular as pressing issues. Some participants even mentioned a change from the perspective of engineers and planners whose approach has moved from building roads to planning for sustainable transportation and building communities. In spite of the growing awareness of the need to shift growth patterns and promote more sustainable communities, very few participants mention an actual increase in funding. Indeed, most participants recognize a

failure to induce change in current development trends despite a change in thinking and crafting plans: ***“The main question is: what did our master plans bring to the area? In fact, through these plans, we have managed to sensitize decision-makers to the pressing issues. However, we cannot really say that our master plans have succeeded in modifying growth patterns in the metropolitan area.”***

The second most cited major change is that currently, planners and decision-makers are facing new problems and more complex questions. Indeed, issues like climate change, smart-growth, and sustainable development are facing planners with new realities that entail more complex solutions to be developed and surely more sophisticated models and tools to answer those questions. This response and the previous one constitute together around 40 percent of all responses; yet, they only indicate an increased awareness rather than a real change in how plans are evaluated and implemented. More detailed discussion on major changes is available in (29).

ASSESSMENT OF EXTERNAL IMPACTS OF TRANSPORT PLANS

Starting with the premise that emerging plans have noble sustainability objectives addressing issues such as the promotion of transit and walking, reducing vehicle kilometres traveled, and building denser urban areas; this section assesses the extent to which potential impacts of the proposed plans are evaluated in a formal way prior to implementation.

Most participants mentioned that at this stage of policy analysis, the most widespread measures being estimated are the ones that are directly output by transportation models, e.g. time, safety, reliability, delay, speed, mode split, transit ridership, vehicle kilometres travelled and trips; in addition to direct costs and benefits. Currently, estimation of environmental, social, and economic impacts of strategic plans is still in its infancy. While most participants recognize the importance of estimating the impacts of different long-range scenarios, few agencies have impacts measures that are derived from model results. Even in these few cases, most are environmental (especially air pollution, greenhouse gas emissions, and land consumption) and economic. The latter are not clearly defined by the agencies and could be mistaken for direct costs and benefits. Federal and provincial institutions seem to be in a better position than municipalities with respect to impact estimation. Still, most participants in these agencies recognize that there is a lot of work to be done on this level, especially concerning social impacts (***“On the social impacts side, we are not doing as well, but this is understandable”***). Even though they are still at their infancy in terms of strategic impact assessment, higher-level institutions seem to be more aware of such impacts and their importance in policy analysis. At the municipal level and within transit agencies, hardly any impacts are estimated (except some environmental impacts in a few cases). This is firstly due to the lack of sufficient resources and expertise to develop and estimate such measures but also because up until now, even though long-range modelling is conducted in many municipalities, scenario analysis is not yet well established.

It seems that there is still much confusion about how sustainability impacts should be internalized within the decision-making process on strategic plans and what they really mean. Many agencies think that by merely promoting transit and improving accessibility, they are

already factoring-in sustainability in their decisions (*“We tried at many times to come up with social criteria and measures and we finally decided that the benefit out of a transit trip is transit ridership. So we have decided that the single most important measure for transit as a social benefit is ridership. A rider gets benefit out of a trip. Now, we treat all riders the same. There isn’t more social benefit for a senior taking transit to a doctor’s appointment than a low-income person accessing a job. It was a whole discussion evolution that got us into this decision”*; *“Equity and accessibility are part of our policies and fare systems. We do look at these things not exactly in terms of evaluation but our bus system and rail system are targeted towards these things”*; *“We promote public transit hence we are promoting sustainable development”*). In a way, sustainability impacts are a subject of discussion when it comes to making strategic decisions in all agencies; still, there is no formal way of internalizing these impacts within policy analysis. The only place where the three types of impacts are indeed used for comparing scenarios is within the Environmental Assessment (EA) process. However, EAs are conducted at the project level whereby different scenarios express different alignments, geometries, operational parameters, etc. rather than strategic directions. In addition, impact analysis in the EA process is mostly based on comparative analyses, weighted decision matrices, and professional judgement rather than formal estimation. While some municipalities feel that they are assessing impacts on the three pillars because of the EA process, most municipalities admit that impact assessment should not only occur on a project basis but also on the strategic level.

Despite recognizing the importance of measuring the impacts on sustainability, some participants feel that the principles of sustainable development are too demanding and force planners to focus more on negative impacts rather than benefits, thereby often compromising transportation projects (*“It is not always possible to assess a policy based on all the effects. There is nothing called a sustainable program, there is a program that is social, environmental, or economic. There is always more of an emphasis on a certain aspect. Sustainability is too multidimensional. Sustainability is not an end, it is one good characteristic of a program; if we have a good understanding of those three elements, we are on the right path. We don’t need to look for the interactions between the three elements to materialize, it is too difficult”*). Many participants mention that financial stakes are often more important than environmental preservation and social equity and that financial sustainability (through continuity of funding) is at this stage their most important concern.

FUTURE OF LAND-USE AND TRANSPORTATION

As a means of assessing the opinion of participants on how the current status of land-use and transportation will potentially evolve in the next 20-25 years, a crude visioning exercise was conducted with each participant. Participants were faced with three different scenarios of the long-range future of transportation in their region³. They were asked to choose which scenario or combination of scenarios best describe the most probable future in their region taking into account current trends in travel, car ownership, urban sprawl, and socio-economics, as well as emerging policies and plans. In 1992, a scenario project was undertaken in several European

³ Federal-level participants were asked about the future of Canada as a whole whereas the rest were urged to focus on their own urban area.

countries. A questionnaire was developed to solicit the opinions of experts involved in transport and communications planning and research with respect to seed scenarios targeting population and lifestyles, regional development and urban form, transport and communications, as well as other fields. The results indicated a widely-shared concern that the existing growth-driven patterns of the time were not sustainable (30).

The scenarios adopted in this survey describe respectively 1) an economic growth scenario, 2) a social equity scenario, and 3) an environmental preservation scenario. These scenarios represent more a set of possible political directions or philosophies rather than potential futures given that they were constructed without the reliance on data. The scenarios were developed to express the three pillars of sustainable transport and represent three extremes which have often been debated by politicians knowing well that the reality would be somewhere in between. The economic growth scenario is characterized by an economically stronger region with increased energy consumption, auto ownership, and vehicle emissions. The social scenario emphasizes a growth in collective rather than individualistic lifestyles; accessibility to basic services and to the downtown core is improved and transit improvements are highly favoured over road investments. The environmental scenario emphasizes limited population and economic growth to reduce pressure on environmental resources; a radical decrease in environmental pollution is witnessed as a result of tighter environmental standards and higher fuel taxes thus creating financial burdens on industries. A summary of the selection of the 26 participants who responded to this question is presented in Table 2.

Out of the 26 participants who responded, 18 pointed towards one scenario while the rest chose one main scenario moderated by one or two others. The economic growth scenario was selected by 15 participants as the main scenario; 6 of them chose to moderate it with the environmental, social, or both scenarios, indicating that despite high individualistic tendencies and a continued dominance of the private car, there is hope that the future will look slightly better. They claim to be adopting a balanced approach between transit and road investments. Accessibility to transit services within the downtown areas is looked at in addition to parking restrictions and better management of truck travel. High densities, active transportation, as well as live/work opportunities are also elements that they are striving to achieve. This group does not have a particular characteristic in common and it is not clear whether they are genuinely more optimistic of the future than those who selected only the growth scenario or just assuming that the future will look better because they are aware of sustainability issues and would hope to achieve them.

The 9 participants who selected the economic growth scenario seem to be very pessimistic with respect to any improvements on the social or environmental level, mentioning that highly individualistic tendencies are prevalent and here to stay. This group acknowledge the recent trends towards smart-growth and sustainability planning but they also recognize the lack of funding for such plans and the unwillingness altogether of decision-makers to chose a different direction. Participants in this group are at the federal level, in Calgary/Edmonton and in the GTA. Many of the GTA participants mentioned that the development of the GTA is tightly linked to that of the US and that the GTA is moving in the same direction. The dissatisfaction with the current situation among this group is quite noticeable.

Participants who identify with the social scenario are mainly in Ottawa, Montreal and Quebec. They indicate that their cities have been aggressively pushing towards promoting social values, improving mobility for the disabled, and looking at health issues.

The two participants in Vancouver chose the environmental scenario indicating that environmental preservation is the main priority in Vancouver and most of their policies are headed towards aggressively curbing road emissions through parking policies, taxation, and promoting public transit. Participants mention that residents in Vancouver highly value being able to have a view to the mountains and clean air, thus rendering them quite accepting of policies targeting car use.

The trend observed in the responses to potential futures is clearly geographic. Responses do not seem to be affected by resources, skills, modelling capabilities, institutional integration, or funding available at the different agencies; but rather, they reflect the “culture and politics” of different urban areas. Among the three scenarios, the economic growth scenario is by far the most selected. Nevertheless, some less extreme components have been incorporated to it. These relate especially to an increase in transit services within downtown areas and a densification of development in urban areas. This outcome is very similar to the one observed in Europe, 16 years ago. The authors observed that despite some less radical notes added to the growth scenario, a rather gloomy outlook on Europe’s future remained (*“The most likely scenario of transport and communications in Europe is a veritable horror scenario. It presents a continent with an unprecedented level of material wealth and technological perfection yet with unparalleled spatial disparities between its regions and cities, congested roads and a collapsed public transport system”*) (30). An even gloomier picture was painted by one Toronto participant about the fate of the GTA (*“We have become a highly consumer-driven society: no regard for environmental issues, high energy consumption. We need a crisis, a calamity to bring those issues into people’s attention. But whenever this happens (energy runs out or an environmental catastrophe), people will start saying why didn’t you see this sooner? In Europe, governments have the guts to tax gasoline or impose environmental and resource preservation policies but in the GTA, things are too comfortable. In addition, we are unable to achieve economic growth anyway because we cannot create a highly attractive business environment. We are also unable to establish a strong investment environment in the GTA. In addition, there is not much social will or acceptance of more social welfare; we are not moving in this direction. On the contrary, we are going right wing: reduce taxes and provide fewer services. In the absence of crisis, there will not be a strong commitment; the industry will not be punished. We are on the road to a major disaster!”*) While European governments may have come a long way since that last study was conducted, it remains to be seen whether Canadian cities will eventually take the leap into more sustainable development patterns.

CONCLUSION

Recently, sustainable development objectives have been at the forefront of planning initiatives in most Canadian urban areas. Many political debates have focused on the need to curb environmental degradation, energy consumption and greenhouse gas emissions, and promote health and social equity. Public environmental and social awareness has also increased which has

put pressure on decision-makers to factor-in the “sustainability terminology” in public discourses and political campaigns. In light of the new challenges facing urban areas, planners have also followed this trend through incorporating sustainability visions and objectives within strategic plans. Sustainability and smart-growth terminology have become widespread and most long-range plans have incorporated transit expansions, promotion of live/work areas, and intensification of development. In addition, visioning exercises and scenario planning that engage the public in “imagining” how their urban areas will look like in the future; have taken a significant role in long-range planning. All of this surely constitutes a step in the right direction. Unfortunately, the progress in thinking and crafting plans at the urban level has not been matched by increased funding.

As a result, frustration among current planners has become common. This frustration has translated into a rather gloomy vision of the future of Canadian cities in the next 20-25 years. Many view their cities as moving towards increased energy consumption, dominance of the private car, social disparity, and environmental damage. Although planners are highly critical of many aspects of the process, they also admit an inability to implement or even initiate change. In the absence of stable sources of funding, evaluation, and implementation of sustainable transportation, transport plans are likely to remain “wish lists” of where planners and communities envision their cities. The progress towards sustainable transportation may indeed be occurring but at very small and timid steps compared to the existing travel and land-use trends.

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TABLES

Table 1 Sustainability Planning As Viewed By Participants

Table 2 Summary Of Business As Usual Scenarios Selected By Participants

Table 1 Sustainability planning as viewed by participants

<i>Environmental/ resource preservation</i>	<i>Social equity</i>	<i>Economic growth</i>	<i>Transit/ transportation options</i>	<i>Limit sprawl/ Increase density</i>	<i>Plan responsibly/ Manage growth</i>	<i>Important concept</i>	<i>Number of participants</i>
√	√	√					4
√	√	√	√				2
√							4
√			√				2
		√					2
		√	√				1
			√				2
				√			2
					√		4
						√	3

Table 2 Summary of business as usual scenarios selected by participants

Economic growth	√	√	√	√			
Social equity	√			√	√	√	
Environmental preservation	√	√				√	√
<i>Number of participants</i>	2	2	9	2	6	2	3

√ → main scenario

√ → additional scenario moderating the main one