



March 31, 2005

Katarina Cvetkovic  
Program Manager  
Transportation Association of Canada  
2323 St. Laurent Boulevard  
Ottawa, ON  
K1G 4J8

Dear Ms. Cvetkovic:

***TAC Sustainable Transportation Award***

We are pleased to submit this application for the TAC Sustainable Transportation Award for our report entitled:

***Promoting Sustainable Transportation Through Site Design: A Proposed Recommended Practice***

IBI Group, primary author of the report (herein referred to as the Guide), is submitting this application on behalf of the Canadian Institute of Transportation Engineers (CITE), the organization responsible for its development. The CITE-appointed project manager (Gene Chartier), who is employed by the Regional Municipality of Durham (a TAC member), has nominated the project. We would appreciate when referencing the application that recognition also be given to CITE.

The remainder of this letter outlines our rationale for considering this project for the Sustainable Transportation Award. The letter is structured in a manner similar to the criteria outlined in your call for nominations.

***PROJECT OVERVIEW***

CITE has developed the Guide to help municipalities and the land development industry better design non-residential development sites to promote accessibility by travel modes other than the single occupant vehicle (SOV). The report, which was published as an Institute of Transportation Engineers (ITE) proposed Recommended Practice in January 2005, also identifies a range of supporting actions and policies that jurisdictions can use to create an atmosphere conducive to sustainable transportation initiatives.

The project was initiated in 2002, with funding assistance from the Institute of Transportation Engineers (ITE) and Transport Canada through its "Moving on Sustainable Transportation (MOST)" program. A Steering Committee of six individuals from across Canada directed the project undertaken by a consultant team lead by IBI Group. Most of the Guide development work took place in 2004, which is identified as a preference by the call for nominations.

## **CONTRIBUTION TO SUSTAINABLE TRANSPORTATION**

Transportation is one human activity that has a considerable impact on the environment. The development of infrastructure for a motor vehicle based transportation system, as is currently the case, requires vast amounts of land, intrudes into natural habitats and permanently alters the landscape. More significant from an environmental perspective is the consumption of large quantities of fossil fuels by the vehicles operating on the system. This consumption exhausts fuel resources and releases pollutants into the atmosphere.

With growing concern that society's continued dependence on motorized vehicles, in particular automobiles, for travel is not environmentally sustainable in the longer term, communities are looking towards sustainable transportation as a potential solution. Sustainable transportation is a concept that promotes a balance of the economic and social benefits of transportation with the need to protect the environment.

But despite awareness of the benefits of sustainable transportation, moving away from today's auto-dominated transportation system presents a formidable challenge. The nature of existing infrastructure, prevailing societal values and preferences, and the flexibility afforded by the personal vehicle tend to perpetuate a policy and decision-making framework focused on the automobile.

Nowhere is this more evident than in the land development process. Over the past five decades, the ease of mobility provided by the automobile has permitted the outward expansion or "suburbanization" of cities, a phenomenon often referred to as "urban sprawl".

Many jurisdictions are responding to this condition through the introduction of land use planning policies, like smart growth initiatives, aimed at encouraging denser, more compact, sequential development patterns. These high-level strategies provide a supportive framework for sustainable transportation, but tend to offer little guidance at the more micro-scale of site design. But it is decisions made at this level of detail that directly influence the form and function of development, which in turn affects the ease and efficiency of sustainable transportation mode use.

In an effort to better understand and define this relationship, CITE prepared the Guide to highlight site design practices that can be applied through the land development process to promote the use of more sustainable modes of transportation, such as walking, cycling and transit. Its primary purpose is to assist policy-makers and professionals involved in the preparation, review and approval of **non-residential** development proposals to identify and incorporate features that make sites more accessible to travel modes other than the single-occupant vehicle (SOV).

An underlying theme of this Guide is the integral relationship between land use and transportation. The Guide is based on the premise that effective site design can enhance the attractiveness, convenience and safety of walking, cycling and transit use, while not compromising the efficiency of travel by other modes. Conversely, sites not designed to provide access for sustainable transportation modes can significantly discourage their use – a preventable situation given the level of information currently available.

***The Guide aims to address the absence of information and guidance on decisions at the site design level that can have a significant influence on sustainable transportation. The document accomplishes this in a manner that supports several of the key components of TAC's New Vision for Urban Transportation, including:***

- ***Providing design practices and policy direction that promote more compact, mixed use urban form, which will help to reduce the need for travel and enhance travel options; and***

- ***Offering alternative development forms and transportation system options that enable less dependence on SOVs through more choice and opportunities for walking, cycling, transit and high-occupancy vehicles.***

### ***DEGREE OF INNOVATION***

The project was conducted in two phases, with the first phase consisting of a research review to determine how the Guide could be developed to enhance, rather than duplicate existing information. This focussed on researching “best practices” for the design and review of site plans in the context of sustainable transportation modes.

The best practices review indicated that:

- Current literature relating to the promotion of alternative transportation modes is primarily directed towards residential development. Roadway and right-of-way layout, alignment and access to the arterial road network have been the focus of most documents. On-site considerations for alternative modes have not been as exhaustively documented.
- Most documents do not provide separate guidelines for different types of non-residential land uses (e.g. retail, industrial, office, etc.), although some include sections for special types of development (e.g. large format retail, drive-through restaurants, etc).
- A comprehensive summary of site design guidelines for all sustainable modes does not currently exist. In the absence of such information, a number of jurisdictions have chosen to develop their own guidelines for review purposes. These documents tend to cover only one or two sustainable transportation modes. In other instances, comprehensive guidelines have been developed by a City, but only for a specific area or planning district.
- Urban design documents/guidelines typically address many of the factors that impact alternative modes, such as building orientation and pedestrian facilities. The primary motivation for these documents is more on creating a sense of place and attractive urban environment than on changing personal travel behaviour. However, the principles are generally the same.
- Planners, transportation professionals and urban designers are currently relying on comprehensive land use/official plans, transportation plans and other “high-level” planning documents for guidance on promoting sustainable transportation. These documents typically provide only broad statements to address the promotion and consideration of alternative modes. If explicitly addressed, sustainable transportation modes comprise only a small section of a larger document.
- Sustainable transportation concepts are well documented in design guidelines and demonstrated in site development across Canada, the U.S. and abroad. The literature review conducted for the project only captured a “snapshot” of the abundant information and case studies available.

Building on the information gathered in Phase 1, the second phase involved developing recommended guidelines. The process followed in preparing the Guide included consultations with practitioners in the urban planning, urban design, transportation planning/engineering, public transit, pedestrian, cyclist, and development communities.

***The Guide is innovative in several ways, addressing many of the deficiencies identified through the best practices review. These include:***

- ***Providing guidance on how to promote sustainable transportation through the development of non-residential sites, which is lacking or absent;***
- ***Offering a consolidated set of recommended practices that address several modes of sustainable transportation, instead of the typical focus on just one mode;***
- ***Providing information that public agencies can incorporate into their local policies, guidelines, ordinances and standards;***
- ***Incorporating practical tools, like the development review checklist, and useful information for both designers and reviewers; and***
- ***Focussing on the site, rather than the mode of transportation.***

***The Guide also provides direction for the design of non-residential sites that are typically viewed to be auto-oriented, like large format (or big box) retail, refuting a myth these sites are inaccessible by other transportation modes.***

#### **FINANCIAL IMPLICATIONS**

The land development process involves many parties, ranging from the developer advancing the site plan application to the municipality responsible for granting approval to proceed. At times, the public and private sector participants can appear to be at odds, with municipal staff portrayed as the “enforcers of standards”, and developers seen to be avoiding such provisions in an effort to minimize their costs.

The Guide adopts the alternative viewpoint that municipalities and developers share a common goal of achieving high quality development that is functional and attractive, and in turn provides a long-term return on investment. In many cases, the recommendations presented may be revenue neutral, or have a small initial cost. Additional costs, if there were any, would typically represent only a small fraction of total site development costs, and may, in fact, result in lower overall life-cycle costs and other benefits. Such benefits include more leasable space (due to higher densities and coverage), better tenants (and higher rents), reduced parking costs (because fewer spaces are required) and improved company and agency image (through enhanced employee morale and recognition for environmental stewardship), not to mention the social and environmental benefits discussed above.

From a public sector perspective, the Guide could help to reduce many direct and indirect costs incurred by governments. Alleviating the need for additional road capacity minimizes the requirement for expenditures on new infrastructure. There is also a reduction in healthcare costs related to injuries sustained in motor vehicle collisions and respiratory illness caused by air pollution. Less traffic congestion reduces delays to passenger travel and the shipment of goods, which reduces time costs and their burden on the economy and individual travellers.

***By promoting more sustainable transportation through site design, the Guide will help to reduce the direct and indirect costs of automobile travel to both the public and private sector, including costs to the environment. This is in keeping with TAC’s New Vision for Urban Transportation objective of a more efficient, user pay transportation system.***

## **APPLICABILITY TO THE TRANSPORTATION COMMUNITY**

Preparation of the Guide included extensive consultation with a range of interested stakeholders, in particular the transportation community. A broad range of transportation practitioners has provided input and offered comment.

The act of preparing an ITE Recommended Practice involves a very rigorous, peer-review process. Unlike other documents, which experience one round of peer-review, ITE subjected the draft report to two rounds of review prior to releasing the document for general membership comment. This involved sending copies of the Guide to well-regarded practitioners throughout Canada, the United States and other countries. Each reviewer was asked to comment on the applicability of the Guide to his or her jurisdiction. The overwhelming majority of responses received were affirmative.

In addition, the proposed Recommended Practice is currently undergoing review by ITE members around the world. Each reviewer is being requested to comment on the following:

1. Are the findings appropriate and valid, and are they properly supported?
2. Does the report present useful information to the profession and/or the general public?
3. Is the document technically adequate and consistent throughout?
4. Are there any significant omissions in the report?

To date, responses have been positive. The following is a selection of some of the many comments received:

*"This guide presents much information for which previously the only recourse was to seek in scattered repositories of planning and engineering guidance-access management literature, parking handbooks, bicycle parking reports, transit handbooks, the ITE Transportation and Land Development handbook, CPTED guidance, and the tiny file on showers and change rooms.*

Dwight Kingsbury, Florida Department of Transportation

*"What a fantastic document! I have been enjoying promising discussions with developers for some of our new programs like Affordable Transportation for Affordable Housing as well as bicycling and walking designs for new developments. This is sure to help our efforts".*

Sue Knaup, Executive Director, Thunderhead Alliance

*"This will become a standard reference work for us in development review and policy-making. I like, too, how it is not absolute in its prescriptiveness, allowing for local circumstances".*

Paul M. Pinsker, City of Vancouver

CITE is currently undertaking workshops across Canada to promote and disseminate the Guide. This is yet another testament to the applicability of the Guide.

**The Guide reflects the conviction that sites designed with sustainable transportation in mind can significantly encourage the use of all transportation modes. This assertion appears to be well supported by the transportation community in Canada and around the world.**

In summary, we believe that this project will serve to enhance the promotion of more sustainable transportation in Canada and abroad. We would like to thank TAC and the evaluation committee in advance for their consideration of our application.

Sincerely,



Brian Hollingworth, P.Eng  
IBI Group



Gene Chartier, P.Eng  
Regional Municipality of Durham

cc: Jim Gough, P.Eng., President, Canadian Institute of Transportation Engineers.

Encl.