

Key Municipal Challenges and Issues and How TAC Can Help to Address Them

In June of 1998, TAC's Strategic Planning Committee established a Municipal Subcommittee to identify, among other things:

- The major challenges/issues currently facing municipalities with respect to transportation; and
- The role that TAC can play in assisting municipalities in meeting the challenges and resolving the issues.

The Subcommittee's initial discussion paper was issued in draft form to TAC's 150+ municipal members as well as to all other Canadian municipalities with populations of 25,000 or more. The resulting report's highlights include the following:

1. TAC is Unique

TAC is a unique organization. It consists of technical, managerial and political participants, and encompasses all modes and all geographic and jurisdictional areas. It has a respected tradition of being a neutral and objective organization in assisting its members and brings together virtually all the major players in Canadian transportation.

TAC has created and maintained a broad and active organization, with products of recognized high value in the transportation area. It is well recognized in North America and is encouraged to enhance its services for the benefit of the municipal membership.

2. The Transportation System Affects all Levels of Government

Eighty percent of Canadians reside in urban areas and, in fact, thirty-five percent of Canadians live in the country's ten largest cities. For some of these municipalities, their population, GDP, budget and tax base is larger than some of the smaller provinces.

Urban development is a reflection of the changing economy. We can no longer rely just on natural resources. The production and export of other goods and services has become fundamental to the Canadian economy. Most of this newer economic activity is based in urban areas and therefore the social, economic and environmental well-being of Canada is increasingly reliant on healthy and competitive urban areas. There is a synergistic relationship between quality of urban life and economic development, and urban transportation is a key factor in this equation. Without a safe, efficient, well-maintained and environmentally supportive urban transportation system, it will not be possible to realize healthy and competitive urban areas.

All levels of government have a stake in the future of urban areas. In particular, federal and provincial governments derive the bulk of their revenues from urban areas through income taxes, business taxes, fuel taxes and so on. They have a vested interest in urban areas as much as local governments. Moreover, the role of the provinces is even more direct since local government is a fundamental constitutional responsibility of each province.

3. Municipalities Face Many Transportation Challenges

Municipal transportation managers have to balance the increasingly complex technical and operational needs of the system against the often competing community, planning and environmental interest. This balancing act is typically carried out with shrinking resources and less authority by virtue of more stringent legislative requirements. The downstream consequences of not adequately discharging this responsibility will have cumulative negative consequences on the attainment of municipal social, economic and environmental sustainability objectives.

The Subcommittee identified eleven key municipal transportation challenges, which in varying degrees, are common to all municipalities. To identify how TAC does or might assist municipalities in meeting these challenges, it also analyzed TAC's services in three areas:

- Information gathering and exchange;
- Facilitation of an issue and preparation of TAC briefings to document the problem and present recommendations for its resolution;
- Development and distribution of tools or guidelines for use by the transportation community in dealing with a particular subject matter.

The 11 challenges and TAC's related activities are set out in the table below.

MUNICIPAL CHALLENGES AND ISSUES	TAC PROGRAMS AND PUBLICATIONS THAT HELP MEET THE CHALLENGES
<p>1. Funding / Financing Municipalities require a consistent funding source year to year in order to develop and sustain the transportation system. Dependable funding is absolutely essential for life cycle asset management to be effective. The main source of municipal funding is property tax that is not adequate relative to need. For municipalities to secure alternative funding sources, specific authority from the provinces is required.</p> <p>There is a need to define and implement new ways to pay for new, expanded and properly maintained urban transportation infrastructure and services.</p>	<p>New Vision for Urban Transportation - Ongoing program to promote the urban vision, which includes alternative financing methods.</p> <p>Financing Urban Transportation - A continuing program by TAC's Urban Transportation Council to further promote the briefing and its principles that include <i>"The need for a new approach to funding sustainable urban transportation systems."</i></p> <p>User Pay – Transportation Funding Issues for the Millennium - A workshop at the 1998 TAC annual conference focused on implications of user pay in roadway transportation. Follow up activities are planned for 1999/2000.</p> <p>Policy Harmonization - 1998/1999 briefing listing six priority policy harmonization issues including: transportation taxation, user pay in transportation and investment decision-making.</p> <p>Taxation - A research project to identify non-competitive tax regimes, propose tax policy changes and select case studies for analysis, evaluate impacts of tax policy changes on Canadian competitiveness and the Canadian</p>

	economy, then reporting results with a goal of influencing future tax policies.
<p>2. Development of Sustainable and Efficient Transportation Systems</p> <p>There is a great deal of concern that the current trend of increasing reliance on the automobile for urban travel will not be sustainable in the long term. A more balanced, responsible and potentially more efficient approach would involve the following:</p> <ul style="list-style-type: none"> • Plan for increased densities and more mixed land use (growth management issue). • Promote walking as a mode of transportation. • Increase opportunities for cycling and in-line skating. • Provide higher quality transit service. • Improve the efficiency of the urban goods distribution system. • Promote inter-modal and inter-line connections (e.g., a number of transfer points are being constructed within major centres to deal with the interface between rail and trucking). • Promote new technologies, which improve urban mobility and help protect the environment. • Optimize the use of existing transportation systems. • Ensure that urban transportation decisions protect and enhance the environment. • Create better ways to pay for future urban transportation systems. 	<p>Cross-Jurisdictional Transportation Planning - Work is planned on case studies and best practices for consensus-building transportation planning processes from around the world.</p> <p>Intermodal Integration (Passengers) - An ongoing program to monitor and support government and industry initiatives to achieve integrated, seamless, multi-modal passenger services (especially for tourism).</p> <p>Intermodal Integration (Freight) - Workshops offered in Montreal and Toronto to promote seamless, multi-modal freight services. An additional workshop is being planned for Calgary. Results will be published during 1999/2000.</p> <p>Planning for Livable Cities - TAC is working on a briefing for publication in 99/00 that will contain practical advice for achieving more environmentally, socially and economically sustainable cities in keeping with local visions.</p> <p>Sustainable Transportation - The Multi-Modal and Urban Transportation Councils will continue council participation on the Climate Change Transportation Table. The Urban Transportation Council will also continue participation with the Centre for Sustainable Transportation and the National Round Table on the Environment and the Economy Task Force on Sustainable Transportation.</p> <p>Urban Transportation Indicators – Phase 2 - Undertaking a second survey with 1996 base year data and an expanded list of survey cities. These results will be used to track progress in achieving the urban vision and help municipalities monitor their own programs.</p>
<p>3. Technology Deployment</p> <p>The application of technology, particularly information and communication systems, is increasingly important to municipalities in order to optimize the use of the transportation system, to enhance safety and to realize efficiencies in the management of the system</p>	<p>ITS Applications - Project to stimulate deployment and application of existing ITS technology in the Canadian transport sector.</p> <p>Canada-U.S. Research Coordination - The Research and Development Council support Canadian participation in several U.S. committees that have direct relevance to the programs and objectives of TAC.</p>

	<p>OECD Road Transport Research Program - The program provides the opportunity to bring back the collective knowledge and experience of experts from OECD member countries, and to export Canadian expertise to the global community.</p>
<p>4. Development and Use of Affordable Asset Management Systems There is a need for the development and implementation of affordable asset management systems for municipalities. Such systems are essential to achieve the most efficient allocation of maintenance and rehabilitation budgets. Many municipalities have not developed asset management systems at this stage because of the lack of resources.</p>	<p>Asset Management for Highway Agencies - A primer on asset management, capitalization procedures and accounting principles as well as network performance indicators.</p>
<p>5. Safety Safety is a primary concern to urban centres given the high volumes of traffic, the conflicting demands on the system and the fact that an increasing percentage of people living in municipalities are elderly.</p> <p>Safety is directly related to a quality of life issue. If the municipal system is deemed sub-standard this will have negative results on the residents of that community and carry adverse affects on its attractiveness for trade and tourism.</p>	<p>TAC Roadway Guidelines - Listed under section 6 of this table.</p> <p>Canadian Strategic Highway Research Program (C-SHRP) - The program's objective is to improve the performance and durability of highways and to make them safer for motorists and highway workers by extracting the benefits of the United States Strategic Highway Research Program (SHRP).</p>
<p>6. Development of Uniform Guidelines and Standards The continued development of guidelines and standards by TAC fulfills a key need for municipalities. From a roadway point of view, TAC should continue to play a major role in the development of national guidelines for the design, construction, maintenance and operation of the facilities.</p>	<p>TAC Roadway Guidelines - The Chief Engineers' Council develop, continuously improve upon, encourage and promote the use of national guidelines for the design, construction, maintenance and operation of roadway infrastructure in Canada. Projects recently completed or planned for completion during 1999 include:</p> <ul style="list-style-type: none"> • Pavement Design and Management Guide (1997) • Design Vehicle Dimensions for Use in Geometric Design (1997) • In-Line Skating Review, Phase 2 (1997) • 4th Edition of the Manual of Uniform Traffic Control Devices for Canada (1998) • Pedestrian Crossing Control Manual (1998) • Canadian Guide to Neighbourhood Traffic Calming (1998)

	<ul style="list-style-type: none"> • Guide to Bridge Hydraulics (1999) • Bikeway Traffic Control Guidelines (1999) • Geometric Design Guide for Canadian Roadways (1999) • Road Salt Management Guide (with Environment Council) (1999) <p>Projects under consideration include:</p> <ul style="list-style-type: none"> • 3R/4R Guidelines for Geometric Design • Bridge Management Guide • Traffic Signal Warrants • Highway Safety Audits • Life Cycle Cost Analysis of Alternative Pavement Designs • Safety Benefits of Road Improvements • Best Practices Information Database (Construction Addition) • Roadway Lighting Guide • Selection Guidelines for Construction Base and Subbase Aggregates • Fish Habitat and Fish Protection Guide
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7. Alternative Service Delivery Mechanisms
 In order to reduce costs, many municipalities are looking at alternative service delivery options such as public/private partnerships, various forms of design/build/operate/transfer approaches, contracting out vs. contracting in or the more traditional use of contractors.

Privatization and Outsourcing of Maintenance Activities -
 TAC has organized two seminars to explore and discuss how Canada's road authorities are modifying how they perform their roadway and bridge maintenance. The seminars were organized to provide delegates with a first hand look at the outsourcing and privatization of road and bridge maintenance.

8. Protection and Enhancement of the Environment
 Most, if not all, municipalities are committed to protecting and enhancing the environment while providing transportation services and facilities. Project planning, design, construction and maintenance are all affected in one way or another by different environmental legislation at the federal or provincial level. Transportation managers must keep informed as to how and when transportation projects and activities can have negative effects on the environment.

Road Salt Management - Production of a Road Salt Management Guide, eight environmental codes of practice and a primer on winter maintenance.

Environment and Health Canada's Second Priority Substance List (PSL2) - Participation on the environmental resource group assessing road salt in the environment, due by December 2000.

The effects of air pollution on public health and the effects of greenhouse gases (GHGs) on global climate are receiving increasing public and political attention. Transportation is a major contributor to air pollution and GHGs and municipalities will be obliged to place a higher priority on these issues within a municipal context.

Fish Habitat and Fish Protection - Preparation of a synthesis of practice of the techniques and methods used to protect fish and fish habitat.

Environmental Management Systems - Roundtable discussion and information exchange on the development and implementation of environmental management systems in Canada.

Environmental Legislation - Information sharing and regular updates on various legislation.

TAC Environmental Achievement Award - Awarded once a year to recognize exemplary contributions by a TAC member in the environmental area with respect to providing transportation services.

A Primer on Urban Transportation and Global Climate Change - Briefing for all members of Canada's urban transportation community dealing with urban transportation decisions that protect and enhance the environment.

9. Public Information and Education

There is a need to better communicate the importance of transportation to both the general public and within the political arena. Well-planned and operated transportation systems directly impact the economic and social fabric of municipalities. Public education programs are required to promote safe practices and behaviour for drivers, pedestrians and cyclists.

Information Dissemination - TAC disseminates a range of technical information by various means:

- R&D Bulletin and TAC News
- Transportation Information Service (TIS)
- Annual Conference
- International Road Research Documentation
- Web site
- Publications

Sustainable Transportation - Urban Vision is featured in a package of materials for training classroom teachers about sustainable transportation issues.

10. Management of the Right-of-Way

The transportation professional must balance the competing needs of the various users of the right-of-way. These are diverse stakeholders with conflicting views and objectives and decisions of the municipal transportation manager usually require the rationalization of trade-offs among

TAC has no direct project dealing with this subject. However, the issue is addressed indirectly by many of the Chief Engineers' Council projects.

these competing needs.	
<p>11. Ongoing Technical and Management Training</p> <p>The importance of ongoing technical and management training and the need to develop and retain a municipality's expertise cannot be over-stated. Agency downsizing and the loss of knowledge and experience is a real concern. Technical training through Universities, Colleges and organizations, like TAC, is very important and should remain a key element of the individual workplans of municipal staff.</p>	<p>Seminars- TAC organizes cross-Canada technical-training sessions on emerging issues in transportation.</p> <p>Seminars are seen as an excellent means of promoting and heightening the awareness of new TAC publications and manuals. Recent or future guide-related seminars include:</p> <ul style="list-style-type: none"> • French Pavement Design and Management Guide; • Pedestrian Crossing Control Manual, the Bikeway Traffic Control Guideline and the In-Line Skating Review: Phase 2 – Alternative Modes seminar; • Canadian Guide to Neighbourhood Traffic Calming; • TAC 1999 Geometric Design Guide for Canadian Roadways; • TAC 1999 Road Salt Management Guide.

4. Feedback From Municipal Officials

Some 260 municipal transportation professionals were asked to comment on the discussion paper. Responses were generally consistent and contained the following four predominant themes:

- There was unanimous agreement with the eleven issues and challenges and TAC's prospective role in addressing these.
- The issue of financing for municipal transportation was highlighted quite frequently.
- There is great reliance on TAC for the development of uniform roadway guidelines. Some respondents expressed that this is a key benefit of their TAC membership.
- Smaller municipalities and rural areas (counties) agreed with the eleven issues and challenges set out above but noted they also faced additional challenges due to their size and rural nature.

The emphasis on financing as noted in number 2 above has largely resulted from a combination of additional responsibilities being delegated to municipalities by provincial governments as well as the withdrawal of subsidies or grants in many cases without any additional revenue sources. The concern regarding rural areas as noted in number 4 above offers TAC an opportunity to possibly become more involved with issues that specifically effect less populated jurisdictions.