

INTRODUCTION

With the population of Calgary surpassing 900,000 people in 2002, the development and enhancement of active and sustainable urban transportation has been key to managing the growth on city streets. The Transportation Solutions Group has been a key player in developing innovative approaches to reducing dependence on the automobile for travel within the city.

When The City of Calgary underwent a re-organization in 2002, a special group was formed within the Transportation Planning Division to look specifically at non-traditional, cost-effective urban transportation projects. The group is comprised of eight members who possess a wide range of expertise including engineering, planning, environmental science and geography. This group was aptly named the Transportation Solutions Group. Their responsibilities include:



- Alternative Transportation
- Bikeway/Pathway Planning
- Transportation Demand Management (TDM)
- Transportation Systems Management (TSM)
- Intelligent Transportation Systems (ITS)
- Community Traffic Calming Studies

The Transportation Solutions Group has played a significant role in the promotion and implementation of innovative transportation solutions, and has contributed to the success of many projects in 2002.

TRANSPORTATION SOLUTIONS GROUP

When the Transportation Solutions Group was formed early in 2002, the team developed a mission statement:

*To promote and implement innovative transportation solutions
that are cost effective and responsive to
the needs of the city... and have fun.*

Following is a brief description of some of the promotion and implementation accomplishments of the Transportation Solutions Group . . . and some of the fun that was had in the process.

Alternative Transportation

One of the unique characteristics of the Transportation Solutions Group is the focus on all road users - not just automobiles. Providing a transportation choice to all people is one of the foundations of sustainable urban transportation. One of the first priorities of the Transportation Solutions Group was to create a new position specifically to promote alternative transportation. This position was filled in January 2002, and has been fundamental in assisting with the development of many innovative alternative transportation programs in Calgary. These programs have been key in promoting the use of walking and cycling as viable transportation modes.

- Bicycle Parking Handbook - In response to demand from cyclists, developers, architects and building owners, the Transportation Solutions Group has developed a Bicycle Parking Handbook. This guide includes information on the various types of bicycle parking, tips on where to locate parking and how much parking to provide. The draft handbook is available online at: http://www.calgary.ca/docgallery/bu/planning/pdf/bicycle_parking_handbook_draft.pdf



- New Cycling Information Line - A new telephone hotline [(403) 268-CYCLE] and email address [cycle@calgary.ca] was set up to provide the public with a direct conduit to cycling information.
- 2002-2003 Pathway and Bikeway Map - A new pathway and bikeway map was completed in 2002, and included updates to the pathway and bikeway system, new topographic base mapping and information on new programs being offered by the City. This release of the map also identified pathways with snow removal and enclosed bike parking sites. A copy of the map is included with this submission.
- Park & Bike Sites - Seven parking lots were identified within cycling distance of downtown where people can drive, park for free, and cycle the remainder of the way to downtown. This transportation alternative appeals to people who may live too far to cycle or must climb steep hills close to home. These sites are identified and promoted on the 2002-2003 Pathways and Bikeways Map, as well as on the City's website.



- Wide Curb Lanes for Cyclists - In an effort to improve conditions for cycling on-street, the City adopted a new cross-section for major standard roads in 2002. This new standard includes a 4.3 metre wide curb lane in both directions. In addition to the widened pavement, bicycle stencil pavement markings are provided to indicate the area for cyclists. A modified standard has also been adopted for existing major roads, and is implemented as road resurfacing occurs. This involves reducing the inside lane typically from 3.7 m to 3.4 m, and widening the curb lane from 3.7 m to 4.0 m. Calgary's first Wide Curb Lane was designated in May 2002 on Home Road, the city's busiest cycling route in the northwest.

Transportation Demand Management

The goal of Transportation Demand Management is the reduction of automobile traffic during the peak period. It is also about providing a "choice" of travel modes for commuters. Some of the TDM projects completed by the Transportation Solutions Group over the past year include:

- Partnership with Commuter Connections - The City of Calgary has partnered with Commuter Connections, to bring their web-based ride-matching initiative to Calgarians. The website, www.carpool.ca, is accessible to employees from participating companies, who want to find carpool partners, reduce emissions, ease traffic congestion and reduce driver stress. As of March 2003, the website had 950 registrants in Calgary.



- Commuter Challenge - In conjunction with Commuter Challenge Week 2002, the Transportation Solutions Group organized a race of commuters using different modes of travel. The Monday morning race kicked off the week long competition. City staff tested four modes: bicycle, carpool, Light Rail Transit (LRT) and bus. Commute times varied from 37 minutes to 47 minutes. Television coverage of the entire cycling trip, as well as other television, radio and newspaper coverage, increased awareness of the travel options available.

The City of Calgary has also created a web-based commuter challenge. The year round, friendly competition among City employees tracks the frequency, distance, greenhouse gas savings and mode of active and sustainable transportation. Prizes are awarded on a monthly basis to active participants. Over 125 people are registered and recording their progress.



- Alternative Transportation Workshop - The Transportation Solutions Group and Commuter Connections co-hosted an Alternative Transportation Workshop in November 2002. The workshop was attended by representatives of 30 of Calgary's largest companies, institutions and government agencies. Information on trip reduction programs, carpooling, transit and transportation alternatives was presented at the all day workshop.

Intelligent Transportation Systems

Intelligent Transportation Systems is the use of technology to make transportation systems safer, more efficient, more reliable and more environmentally friendly, without necessarily having to physically alter existing infrastructure. In-line with the Transportation Solutions Group mission statement, this allows for low-cost solutions with high benefits. Some of the group's accomplishments in the area of ITS include:



- A new ITS Specialist position was created in 2002 to lead the promotion and implementation of Intelligent Transportation Systems at the City of Calgary. The primary focus of this position to date has been project management of the ITS Strategic Plan.
- ITS Strategic Plan - In 2002, the City began to develop an ITS Strategic Plan. The purpose of this project is to develop a comprehensive "roadmap", setting the direction and pace of ITS investments within Calgary over the next ten years and beyond. Over thirty internal and external stakeholders have participated in the process.

Transportation Systems Management

Making the most of our existing road infrastructure is key to affording the cost of traffic growth in the City. One of the main ways of accommodating the growth is through Transportation Systems Management. The Transportation Solutions Group has been involved in developing a number of projects which provide a high benefit to all road users without the significant cost of major roadwork. Some of these projects include:

- LRT Operational Improvements in the Downtown - The Transportation Solutions Group developed and promoted the implementation of a solution that decreased LRT train delays by 15-25% along the main transit corridor in the downtown. The benefits: reducing the LRT fleet requirement by one train while still maintaining the

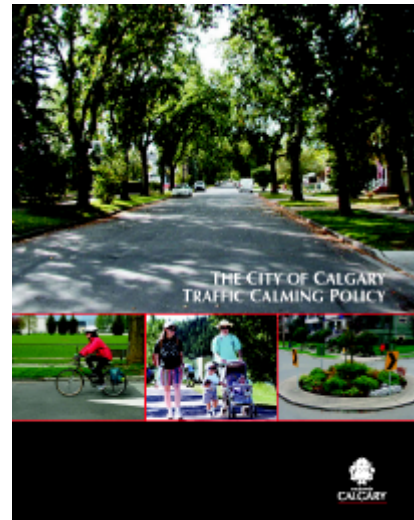
same level of service (est. \$500,000 savings); additional reduction in downtown auto travel delay of 14%, with an equivalent reduction of ~2,000 tonnes of CO₂ per year. The total delay savings are estimated to be \$1.5 million per year. The cost to implement this project was negligible.

- Low-Cost Intersection Improvements - Providing low-cost solutions and alternatives to improve delays at major intersections throughout the City. A program is underway to design and develop low-cost intersection improvements that will greatly reduce delay and improve safety. Four intersections were reviewed in 2002 and are scheduled for construction in 2003.

Traffic Calming

Traffic calming offers a means of resolving traffic and safety problems, and preserving and enhancing neighbourhood liveability. In addition, the use of physical measures to alter driver behaviour typically improves the conditions for non-motorized street users.

- Traffic Calming Policy - The Transportation Solutions Group developed a comprehensive Traffic Calming Policy in 2002 to proactively address traffic problems, and to guide the implementation of traffic calming measures city-wide. Some of the improvements introduced by the new policy include a process for screening and responding to requests, a methodology to prioritize community needs, an annual budget and improved design information relative to the 1998 Canadian Guide to Neighbourhood Traffic Calming. The new policy identifies appropriate traffic calming measures for different types of streets, emphasizes self-enforcing measures and promotes communities helping themselves to address traffic issues. A 10% cost allowance was included in the budget so that communities could enhance basic traffic calming measures. In addition, a commitment to better trial traffic calming measures was made.



As a means of disseminating the information contained in the new Traffic Calming Policy, the members of the Transportation Solutions Group were actively engaged in making presentations to various public groups and City staff. The policy document was distributed both in paper and electronic versions, and is also available on the City's website. In addition, a few milestones were achieved throughout the year in the area of traffic calming:

- The City's first speed humps were installed in 2002 as part of a community traffic study in Hillhurst. The objective of this installation was to reduce short-cutting

traffic and speed through the community. Based on before and after traffic counts, the speed humps resulted in a 20% reduction in overall volume, and a 24% reduction (55 km/h to 42 km/h) in the 85th percentile speed.

- The City's first traffic circles were installed in the fall of 2002 as part of the Crescent Heights community traffic study. These traffic calming measures were installed after a significant community consultation process, that also involved stakeholders from the Fire Department and Calgary Transit.
- The development of a fully interactive CD entitled, "Community Traffic Issues – Approaches and Solutions", commenced in 2002 and will be completed in the spring of 2003. The CD provides valuable information to the public and to City staff on how to deal with community issues. It contains information on the new Traffic Calming Policy with video clips and audio explanations in a user friendly format. Through the fall and winter of 2002, the beta version of this CD was previewed with various audiences in order to fine-tune the final product.

Information Dissemination

- The group has seen a significant increase in positive media exposure over the past year. Traffic is consistently the number one issue for the public and many of the group's projects have been featured in Calgary and area newspapers. Many group initiatives have attracted the attention of local radio or television stations. Three group members have received formal media training, and have appeared in numerous radio and television interviews, including a spot on the A-Channel's "Big Breakfast" show. Some of the initiatives that have attracted the most media attention include significant operational improvements to Calgary's LRT, alternative transportation fairs, an internet-based carpool program, cycling initiatives, community traffic studies and a new traffic calming policy.



- With the development of a new City web portal, the Transportation Solutions Group significantly improved the content and layout of the transportation material related to its area. In 2002, new and improved content was added to channels such as Cycling, Intelligent Transportation Systems and Sustainable Transportation. This initiative was in response to City Council's priority to improve communication



with the public. The new content can be viewed online at www.calgary.ca/transportation.

... And Have Fun!

In addition to working hard, the Transportation Solutions Group has managed to have fun in the process. Monthly lunches with special guests, city tours, a visit and information exchange with Edmonton counterparts, an active “cookie club”, working sessions in the Rocky Mountains, daily banter and “tasteful graffiti” on the group’s whiteboard all contribute to fun on the job!



The social relationships of the group members carry over into strong working relationships. This has created a work environment where productivity and quality of work has increased. In this positive setting, group members willingly share ideas and concepts and work together as a team in developing new techniques and methodologies.

SUMMARY

The Transportation Solutions Group has made significant contributions to the development and enhancement of sustainable urban transportation in the City of Calgary. In 2002, they made considerable advances in the promotion and implementation of innovative transportation solutions, that are cost effective and responsive to the needs of the city.