

## Opening Plenary:

# *Transportation Productivity and Innovation*

Doug Johnson launched the innovative theme in the opening session of the 2011 conference. He emphasized that the motivation for designing the conference program around productivity and innovation is a sense that Canada is not being aggressive enough collectively and that we should be seeking to encourage new approaches. The speakers that followed met his challenge.

Ross Mackenzie of the Waterloo Centre for Automotive Research gave a number of examples of productivity enhancement through continuous improvement driven by innovation. There were also interesting perspectives on what we can expect to see in vehicles and infrastructure in the future. Productivity is a focus for vehicle manufacturing and operations. Innovation extends even further into how the vehicles get used and interact with other vehicles and with the infrastructure while in motion. There was an excellent high-level introduction to telematics, green propulsion, power train developments, selection of materials for strength and lightweight characteristics and much more.

The main areas where large-scale innovations appear to be occurring is in software and systems both in the design and redesign of vehicles as well as in the operation over the roads. Connectivity is the best way to describe the fruits of innovation with respect to operation by users. This included vehicle to infrastructure and vehicle to vehicle examples and pushed the application of long-range and short-range wireless capabilities. The audience got a glimpse of a few electric and hybrid electric vehicles. Hydrogen Fuel Cell potential was also described as being “finally on the horizon legitimately”. The overall conclusion is that this is a very active area with a lot of cooperation between the industry and the Universities of Waterloo, McMaster, Windsor and the University of Ontario Institute of Technology.

Phil Ireland presented the railway perspective and, here again, a lot of innovation in communication within the railway

and between the railway and customers was the focus of his presentation. He talked about auto-inventory reporting (AIR) using field handheld devices and automatic online recording of fulfilling assignments by conductors at customer sites using AIR tablets.

An interesting point was raised concerning how the railway industry is adapting to demographic changes. In the next five years, 35 % of the workforce will reach retirement age. Productivity improvements are essential to being able to maintain service reliability, efficiency and capacity because replacing all of these workers is not sustainable over the long run. Approaches tend to rely on real-time data streaming, wayside devices vs. manual inspection and aggressive development of data and modeling capability. The different wayside devices are also being considered to do their work at track speeds rather than at low speeds or in stationary mode for manual work. Examples were also given of the development of technologies that can see defects more reliably than the naked eye. For example, ultrasonic testing of wheels and rails enables defects to be spotted and repaired on a preventive basis before they become critical.

Fassi Kafyeke provided the aviation perspective from his position as director of technology at Bombardier Aerospace in Montreal. He talked about Bombardier's different aircraft series and the cycle of overall development in nine Readiness Levels (RL), from concept (RL1) to revenue service (RL9). His responsibility covers RL1 to RL7, which is in-flight testing. Innovation is essential for product differentiation and, ultimately, market success for aircraft producers. The measures of differentiation include the reduction of net carbon into the atmosphere through fuel burning, new aircraft configurations, structural changes and operating systems (Bombardier buys propulsion from other suppliers so the technology in engines was not covered in the scope of this talk). The development cycle of aircraft needs to be reduced from the current 15 years,



made up of 10 for technology readiness level one to seven, and then five more for testing and production and introduction into revenue service. That is his current challenge.

Kristine Burr, Assistant Deputy Minister, Policy for Transport Canada, completed this stimulating panel with overarching comments on the need for innovation to remain competitive, to be sustainable, and contribute to prosperity in long-term economic growth. Transport Canada has been actively cultivating its role as a knowledge broker, catalyst and facilitator to help players break down barriers and achieve new levels of productivity and innovation. We seem to be having reasonable success in generating the ideas, but our need for improvement is in commercializing our research and development products. The question was posed, "What more can be done to encourage a new generation of best practices?" Transport Canada has held a series of round tables that started in October 2009 in Montreal and then were conducted in a number of Canadian cities through to spring of this year. A wrap-up report of that initiative will be available to the public very soon. The next steps are to keep working and looking for a new vision.



Doug Johnson a lancé le thème portant sur l'innovation lors de la séance d'ouverture de l'édition 2011 de la conférence CTRE. Il a expliqué que le choix du programme de la conférence qui porte sur la productivité et l'innovation est dû au fait que le Canada n'est pas assez agressif collectivement, et que nous devrions chercher à encourager de nouvelles approches. Les conférenciers qui ont suivi ont tous su rencontrer son défi.

Ross Mackenzie, du Waterloo Center for Automotive Research, a donné plusieurs exemples de renforcement de la productivité par le biais de l'amélioration continue axée sur l'innovation. On nous a aussi présenté des perspectives intéressantes sur les futurs véhicules et infrastructures. L'accent a été mis sur la productivité pour la fabrication des véhicules et des opérations. L'innovation a également été mise de l'avant dans la façon dont les véhicules sont utilisés et interagissent avec d'autres véhicules, et avec l'infrastructure lors de déplacements. Il y eu une excellente introduction de haut niveau, entre autres, à la télématique, à la propulsion verte, à l'évolution des développements en motopropulseurs et à la sélection de matériaux pour assurer la solidité et la légèreté.

Les principaux domaines où les innovations à grande échelle semblent se produire sont dans les logiciels et les systèmes à la fois dans la conception des mises-à-jours et la

nouvelle conception de véhicules, ainsi que dans l'opération sur les routes. La connectivité est la meilleure façon de décrire les fruits de l'innovation pour ce qui est de l'exploitation par les utilisateurs. Ceci incluait les liens véhicules-infrastructure et des communications entre véhicules afin de stimuler l'augmentation de capacités sans fil à long terme et à court terme.

Le public a eu un aperçu de quelques véhicules électriques et hybrides. Le potentiel de Hydrogen Fuel Cell a également été décrit comme étant «enfin à l'horizon de façon légitime». Il a été conclu que cela semble être un domaine très actif avec beaucoup de coopération entre l'industrie et les universités de Waterloo, McMaster, de Windsor et l'Université de l'Ontario Institute of Technology.

Phil Ireland a présenté la perspective du chemin de fer et, encore là, l'innovation dans la communication au sein du chemin de fer et des clients a fait l'objet de sa présentation. Il a parlé des rapports d'auto-inventaire (AIR - en utilisant des appareils portables sur le terrain) et l'enregistrement automatique en ligne par des conducteurs sur les sites des clients en utilisant des appareils AIR.

Un point intéressant a été soulevé concernant la façon dont l'industrie ferroviaire s'adapte aux changements démographiques. Au cours des cinq prochaines années, 35 % de la main-d'œuvre atteindra l'âge de la retraite. Des améliorations au chapitre de la productivité sont essentielles pour être en mesure de maintenir la fiabilité du service, ainsi que l'efficacité et la capacité, car remplacer tous ces travailleurs n'est pas viable sur le long terme. Les approches ont tendance à compter sur la diffusion en flux de données en temps réel, les équipements en bordure de route vs l'inspection manuelle, et le développement agressif de données et de la capacité de modélisation.

Les différents équipements en bordure de route sont également envisagés pour faire leur travail à des vitesses normales plutôt qu'à basse vitesse ou en mode stationnaire pour le travail manuel. Des exemples ont également été donnés sur l'élaboration de technologies qui permettent de voir les défauts avec plus d'exactitude qu'à l'œil nu, par exemple le contrôle par ultrasons des roues et des rails afin que les défauts puissent être repérés et réparés sur une base préventive avant qu'ils ne deviennent critiques.

Fassi Kafyeke a fourni la perspective de l'aviation à partir de son point de vue en tant que directeur de la technologie chez Bombardier Aéronautique (Montréal). Il a parlé des différentes séries d'avions de Bombardier et du cycle de développement

global en neuf niveaux de préparation (RL – Readiness Levels), à partir de la conception (RL1) jusqu’au service payant (RL9). Sa responsabilité couvre RL1 à RL7, qui consiste en les essais en vol. Pour les producteurs d’avion, l’innovation est essentielle pour la différenciation des produits et, ultimement, le succès du marché.

Les mesures de différenciation comprennent la réduction de carbone net dans l’atmosphère par la combustion du mazout, les nouvelles configurations d’avions, les changements structurels et les systèmes d’exploitation (Bombardier achète la propulsion d’autres fournisseurs, alors la technologie en moteurs n’est pas couverte dans le cadre de cet exposé). Le cycle de développement des avions doit être réduit des quinze ans actuels, dix ans pour le niveau de RL7, puis cinq autres pour les essais et la production et l’introduction aux services payants. Il s’agit là de son défi actuel.

Kristine Burr, Sous-ministre adjointe, Politiques, Transports Canada, a terminé cette session avec des commentaires généraux sur le besoin d’innovation pour rester compétitifs, pour être durables, et pour contribuer à la prospérité à long

terme de la croissance économique. Transports Canada cultive activement son rôle de courtier du savoir, de catalyseur et de facilitateur pour aider les joueurs à éliminer les obstacles et atteindre de nouveaux niveaux de productivité et d’innovation.

Nous semblons avoir un certain succès à générer les idées, mais notre besoin d’amélioration est dans la commercialisation de notre recherche et le développement de produits. Kris a posé la question «Que peut-on faire pour encourager une nouvelle génération de meilleures pratiques?»

Pour répondre à certaines de ces questions, Transports Canada a tenu une série de tables rondes qui ont débuté en octobre 2009 à Montréal puis ont été menées dans un certain nombre de villes canadiennes jusqu’au printemps de cette année. Un rapport synthèse de cette initiative sera à la disposition du public très bientôt.

Les prochaines étapes consisteront à continuer à travailler et à rechercher une nouvelle vision.

Submitted by Michael Kieran.



## **CTRF Board of Directors: Incoming and Outgoing**



L to R: Sandi London, Dan Lynch, Darryl Anderson, Fred Barzyk, Kalinga Jagoda, Lloyd Ash, Alex de Barros, Carole Ann Woudsma, Mark Hemmes, Phil Davies, Rachid Raffa, Ana Yanes, James Perttula, Doug Johnson, Vijay Gill, Garland Chow, Jean Patenaude, Joseph Monteiro, Malcolm Cairns, Gord Baldwin.

# President's Message



**Vijay Gill**

I am honoured to have been selected as the new President of the Canadian Transportation Research Forum. I would like to thank the immediate Past President, Doug Johnson for all of his great work. I would also like to thank all of the past board members for their contributions, including: Darryl Anderson, Gord Baldwin, Lynn Bryant, Emile Di Sanza, Andy

Elliott, Paul Larouche and Matthew Morris. Although they are no longer official board members, I certainly look forward to working with all of them as “friends” of the CTRE.

I am also looking forward to working with the new board of directors over the next year and beyond. Our board members for 2011-12 are:

**Jean Patenaude**, Executive VP; **Doug Johnson**, Immediate Past President; **Carole Ann Woudsma**, Secretary; **Alex de Barros**, VP Awards; **Philip Davies**, VP External Affairs. **Mark Hemmes**, VP External Support; **Gerry Kolaitis**, VP Finance and Treasurer; **Lloyd Ash**, VP Meetings; **Kalinga Jagoda**, VP Program and Publications; **Marc-André Roy**, VP Organization and Development; Councillors: Fred Barzyk, Malcolm Cairns, Garland Chow, Sandi London, Dan Lynch, Joseph Monteiro, James Perttula, Rachid Raffa, Pamela Ritchie, Gordon Tufts and Ana Yanes.

## 46<sup>th</sup> Annual Conference

As all of you who were able to attend can attest, the 46<sup>th</sup> Annual Conference in Gatineau was an overwhelming success. This would not have been possible without all of the hard work from the conference organizing committee, particularly Gord Baldwin, Marlene Baldwin, Judy Cairns and Malcolm Cairns. We had three great panel sessions and a great number of paper submissions and presentations as usual.

We had a very memorable session in honour of three great colleagues who are unfortunately no longer with us: Frank Collins, John Heads and Bill Waters. Although we only had a single session in order to honour all of their contributions, it would not be difficult to devote an entire conference to their achievements. We had the pleasure of announcing scholarships in each of their names at the conference.

I want to welcome our newest CTRF honorary life member, John Lawson. In addition, we have three members in our new **Honorary Life Companion** category: Judy Cairns, Eve Collins and Joanne Waters.

Finally, I would like to congratulate the winners of the Bison Transport Debate: Garland Chow and Marc-André Roy. We're all looking forward to watching them defend their title at the conference next year!

## Next year and beyond

Speaking of next year's conference, it will be held in Calgary from June 3 to June 6, 2012. Make sure to mark the dates on your calendar. In addition to seeing the usual faces, I'm hoping to see many new ones, as I did this year. Many of you know the CTRF as a club and that it is. However, I'm hoping to see the club grow over the next few years, so make sure to spread the word!

Vijay Gill  
CTRF President

## — Message du président —

J'ai l'honneur d'avoir été sélectionné comme nouveau président du Groupe de recherches sur les transports au Canada (GRTC). J'aimerais remercier mon prédécesseur, Doug Johnson, pour son excellent travail. Je souhaite également remercier tous les anciens membres du conseil pour leur contribution, notamment : Darryl Anderson, Gord Baldwin, Lynn Bryant, Emile Di Sanza, Andy Elliott, Paul Larouche et Matthew Morris. Même s'ils ne font plus officiellement partie du conseil, j'espère qu'ils continueront d'apporter leur contribution au GRTC à titre amical.

J'ai également hâte de travailler avec le nouveau conseil d'administration au cours de la prochaine année et par la suite. Les membres du conseil de 2011-12 sont :

**Jean Patenaude**, vice-président exécutif; **Doug Johnson**, président sortant; **Carole Ann Woudsma**, secrétaire; **Alex de Barros**, vice-président Prix; **Philip Davies**, vice-président Affaires externes; **Mark Hemmes**, vice-président Soutien externe; **Gerry Kolaitis**, vice-président Finances et trésorier; **Lloyd Ash**, vice-président Réunions; **Kalinga Jagoda**, vice-président Programmes et publications; **Marc-André Roy**, vice-président Organisation et développement; et les conseillers : Fred Barzyk, Malcolm Cairns,

Garland Chow, Sandi London, Dan Lynch, Joseph Monteiro, James Perttula, Rachid Raffa, Pamela Ritchie, Gordon Tufts et Ana Yanes.

#### **46<sup>e</sup> conférence annuelle**

Comme tous ceux d'entre vous qui y ont participé peuvent le confirmer, la 46<sup>e</sup> conférence annuelle, qui a été tenue à Gatineau, a obtenu un immense succès. Cela n'aurait pas été possible sans le travail soutenu du comité d'organisation de la conférence, en particulier Gord Baldwin, Marlene Baldwin, Judy Cairns et Malcolm Cairns. Nous avons tenu trois excellentes séances du comité et les présentations et exposés ont été nombreux, comme toujours.

Nous avons tenu une séance des plus mémorables en l'honneur de trois formidables collègues qui ne sont malheureusement plus des nôtres : Frank Collins, John Heads et Bill Waters. Même si nous avons tenu une seule séance pour souligner leur contribution, il ne serait pas difficile de consacrer une conférence entière à leurs réalisations. Nous avons eu le plaisir d'annoncer la création de bourses d'études portant leur nom pendant la conférence.

Je veux souhaiter la bienvenue au plus récent membre honoraire à vie du GRTC, John Lawson, ainsi qu'aux trois membres de la nouvelle catégorie des **Compagnes et compagnons honoraires à vie** : Judy Cairns, Eve Collins et Joanne Waters.

Enfin, j'aimerais féliciter les gagnants du Débat Bison Transport : Garland Chow et Marc-André Roy. Nous avons tous hâte de les voir défendre leur titre pendant la conférence de l'année prochaine!

#### **L'année prochaine et par la suite**

La conférence de l'année prochaine sera tenue à Calgary du 3 au 6 juin 2012. Notez-la à votre agenda. En plus d'y voir les participants habituels, j'espère en rencontrer de nombreux nouveaux, comme ce fut le cas cette année. Beaucoup d'entre vous voient le GRTC comme un club et c'est ce qu'il est. Toutefois, j'espère voir ce club grandir au cours des prochaines années, alors assurez-vous de le faire connaître!

Vijay Gill  
Président du GRTC



## **Award Winners**

# *CTRF Scholarship Competition 2011-2012*

### **Canadian Pacific Railway Scholarship**

Timothy Shah, University of British Columbia

### **CN Scholarship**

Julie Lepage, Université Laval

### **Ministère des Transports du Québec Scholarship**

Shixu Liu, University of New Brunswick

### **Transport Canada Scholarship in Safety and Security in Memory of Frank Collins**

Hans Zhao, University of New Brunswick

### **Transport Canada Scholarship in Sustainable Transportation in Memory of William Waters**

Pierre-Luc Fecteau, Université Laval

### **Transport Canada Scholarship in Safety and Security/Sustainable Transportation in Memory of John Heads**

Kristian Larsen, University of Toronto

CTRF wishes to thank our supporters, without whom these awards would not be possible. They include: Canadian Pacific Railway, CN, Ministère des Transports du Québec, Transport Canada and other corporate and individual contributors. Thank you.

## **Panel Summary: Urban Road Congestion Issues**

The Tuesday Panel Session was moderated by Malcolm Cairns who invited four speakers to give their perspectives on urban road congestion issues.

David Bradley, of the Canadian Trucking Alliance was the first to respond with an engaging representation of the trucking industry and how it plays an important role in the balancing act between goods movement and liveable communities. He pointed out the often forgotten benefits of trucking for communities, and identified the need for practical planning measures such as improved road design standards for trucks, parking for delivery vehicles, improved clearance of road collisions, and consideration of truck only lanes in congested areas. He proceeded to dispel several myths about trucking and urban congestion; pointing out that trucking is indispensable for the prosperity of communities, that the trucking industry has built-in incentives to reduce empty miles, and that carriers would be willing to operate off-peak if shippers/receivers requested deliveries at those times.

Brian Taylor, Professor and Chair of Urban Planning at UCLA, followed by making four points about urban congestion. 1) He reminded the audience that congestion is not what it seems, in particular the non-linear nature of traffic flow means we can achieve the unexpected effect of increasing traffic flow through road pricing. 2) He identified reasons for congestion in Los Angeles especially that the city-region has higher density than others in the United States because of its compact suburbs. 3) He noted that compact transit-oriented communities can be expected to have higher congestion, which may not be bad if transport choices are available. 4) He pointed out three ways to reduce congestion are to increase supply, reduce demand

and to bring supply and demand in line through road pricing. Since none of these are popular, congestion is generally being adopted as the most politically acceptable way to deal with the transportation capacity problem.

Kevin Bebenek, from IBI Group and a member of ITS Canada, explored the potential for ITS to address urban congestion. He pointed out the shift in ITS from infrastructure-based systems that have been largely funded by the public sector to a surge of service-oriented systems offered by the private sector. He argued that the future of ITS to address congestion depends on the public sector's ability to embrace the fast-paced development of new products and services, to find innovative delivery options (e.g. PPP's), and to ensure the frameworks are in place to ensure that higher order benefits can be achieved from these technologies.

Richard Soberman gave the final address, and entertained the audience with his thought-provoking perspective on the problems of urban transit in Canada. He critiqued the simplistic view of many that congestion can be solved with the "Magic Bullet" of massive investment in transit, reliance on light rail technology alone, road pricing (ignoring the unintended consequences) and financing through public private partnerships. He argued that the key problems of public transit in Canada are 1) Exaggerated expectations for transit projects (highly overstated benefits and highly understated costs). 2) Transit projects are politically motivated, 3) Transit does not have market discipline, (resulting in poor customer service), 4) No concept of due diligence, 5) Unpredictable revenues for transit agencies, and 6) Weak governance. The audience expected a combination of wisdom and wit from Richard, and once again were not disappointed.

Submitted by Matthew Roorda.



## **Special Session: Reflections on the Reviews of the Federal Transportation Act – In tribute to and memory of John Heads, Frank Collins and Bill Waters**

CTRF's Tuesday luncheon was in tribute to and memory of John Heads, Frank Collins and Bill Waters as part of a special session on "Reflections on the Reviews of the Federal Transportation Act".

In his tribute to John Heads, Dave Hackston reflected on John's early career days working for the province of Manitoba

and subsequently the Canadian Transportation Commission Research Branch, the Rail Transport Committee and the Western Grain Transportation Act. Dave spoke of how John's contribution to transportation research continued with his involvement at the University of Manitoba in the late 1980's and his role as Research Director at the National Transportation Act (NTA) Review Commission in 1992.

Michael Kieran's tribute to Frank Collins was strongly inspired by the legend of Sam McGee. Michael noted Frank's early work in air transport in the Caribbean followed by his many years as a transportation specialist at KPMG where his standards of professionalism were legendary. A plaque hanging in Frank's office said it all: "*only the best is good enough*".

John Lawson spoke of his close friendship with Bill Waters, recalling one of their early discussions over a pint in a pub in London, U.K. in the mid-1970's. John recounted Bill's extensive teaching and research career at UBC, his involvement with the Logistics and Transportation Review, his work at the UBC Centre of Transportation and his pivotal role at the Canada Transportation Act Review in 2000-2001. On the lighter side there were references to Bill's famous and colourful ties (made by his wife Joanne), his love of travel and the outdoors, and (reaching back a few years) a trip to a NASCAR event in Las Vegas.

Nick Mulder spoke of the work of the NTA Review Commission which led to major changes in transportation policy and of the research in accessibility, trucking safety and rail rationalization. Nick noted how the work of John Heads, as Research Director of the NTA Review, and how Frank Collins as a member of the NTA Review Commission and subsequent special advisor to the Minister of Transport advanced the field of transportation policy .

In his reflections on the Canada Transportation Act Review (CTAR) of 2000-2001, Brian Flemming spoke of Bill Waters' contribution as one of the principal intellectual "engines" of the endeavour and of Bill's role in motivating the CTAR Panel to seek ideas that would foster more competition in modes of transport. Recognizing Bill's dedication and lifetime achievements in transport economics, Brian noted that road pricing was one of Bill's areas of passionate debate and how relevant it remains today not only in Canada but throughout other countries. On the "thorny" issue of how to foster railway competition, Brian noted how Bill's "...carefully constructed pricing solution led (the CTAR Panel) to a compromise between two extreme positions ...". Brian summed up the invaluable contribution that Bill Waters made to the field of transport economics and policy in his closing line: "...as for Bill, we shall not see his like again in our lifetime".

Submitted by: Emile Di Sanza



### *CTRF Conference Dinner Excursion on the Hull-Chelsea-Wakefield Steam Train*



## Summary of Panel Session

# *Transportation and the Environment*

Four panellists gave excellent presentations, all related to the theme of the session. The first panellist was Olivier Joubert, Director of Logistics at Walmart. Mr. Joubert explained the commitment to sustainability within all levels of Walmart's operations, including all their retail units in the different countries where the company is present. Elements of the Walmart supply chain are integrated in their commitment to accelerate the achievement of sustainability goals which are to be 'supplied' on 100% renewable energy, create zero waste, and sell products that sustain people and the environment. Mr. Joubert went on to explain how sustainability contributes to productivity and viability improvements. The seriousness attached by Walmart to its sustainability goals is well served by an internal structure allowing to cater solutions from within the organization, to build from internal best practices and to achieve a commitment and engagement conducive to concrete measurable achievements. Mr. Joubert used examples to illustrate the type of commitments and initiatives introduced. Of particular interest in the examples used were the ones showing the use of renewable energy and the testing of a zero waste store. With respect to transportation, Walmart's sustainability plan engages carriers, rewarding the ones with best practice accomplishments. A shift from trucking to rail has also been initiated, CN now being used to serve a number of Walmart stores in Eastern Canada. Mr. Joubert mentioned that Walmart is a strong advocate of long combination vehicles as they would fit well with Walmart's sustainability strategy but not all provinces authorize their use on their road network.

The second panellist was Jonathan Burke, a Vice-President at Westport Innovations, a global leader in natural gas engines. He explained the geographical scope of his world leading company, and how it uses 'partnering' to insert its technology on others' vehicle platforms. He illustrated with examples of what such partnerships have permitted, including having a portion of a truck fleet running on transformed food-waste energy to pick up garbage in Paris. He gave data showing Canada's dependence on petroleum-derived fuels, half of which comes from imported sources, and on the resulting GHG emissions and transportation share. He used the concept of wheel-to-wheel emissions in his comparison of natural gas/diesel and the reductions in emissions to come from such a shift. He gave an idea of the importance of the stock of natural gas and its price in relation to the price of conventional fuel. He used Los Angeles to illustrate how replacing diesel trucks operated within L.A. by natural gas engine trucks would reduce significantly the health risks from air toxins. He was able to give examples of trucking firms that have introduced some natural gas propelled vehicles, e.g., Robert in the province

of Quebec, Vedder in British Columbia, UPS in Atlanta. A list of natural gas vehicles available on the market showed the potential for further market penetration of such vehicles but Mr. Burke indicated the importance of incentives to achieve such penetration as tax credits, and other fiscal incentives such as an accelerated capital cost allowance.

Ms. Dalila Giusti, President of Jade Acoustics, a firm specializing in noise and vibration assessment, was the third panellist. She started by giving an overview of the methods that exist and are used to predict or assess noise and vibration. She mentioned the following methods: STAMSON for road noise, STEAM for rail noise, NEF/NEP contours for airport noise, ISO9613-2 for stationary sources such as the noise emitted within the premises of a firm. She went on to give a sense of the importance of the information needed to apply such methods, e.g., traffic data broken down by vehicle types, topographical and operational data. She flagged the challenge of keeping information 'current' as changes introduced over time can modify the noise/vibration footprint. She mentioned that some of the information needed to do a good assessment is sometimes difficult to obtain for different reasons including commercial sensitivity. The other issue of importance she identified was the lack of clear guidelines within Canada on permitted noise levels. To illustrate her point, she gave an overview of what is in place at the municipal, provincial and federal level to point out the resulting challenges of assessing compliance. She also discussed the different possible mitigation measures, demonstrating why, at the end of the day, sound barriers end up being the preferred option.

The fourth Panellist was Mr David Bolduc from Green Marine, a voluntary marine industry environmental program, with the objective of improving the environmental performance of the marine industry. It is a national program currently with 54 participants – shipping lines, ports, terminals and the Seaway. David explained the governance and structure of the organization, outlined its use of performance indicators, and identified the issues currently being addressed – emissions, invasive species in ballast, dust/noise/odour at ports and terminals. The organization has an impressive list of supporters from federal and provincial government departments, and environmental groups such as Ducks Unlimited and the World Wildlife Fund. David explained that Green Marine is in the process of updating its programs to 2012 by inclusion of water and land pollution prevention at ports, waste management, and the development of specific requirements for shipyards.

Submitted by Roger Roy.

# Announcements

University of Manitoba Transport Institute

Supply Chain Connections Conference

**August 23 & 24, 2011**

Delta Hotel

Winnipeg, Manitoba

[www.umti.ca](http://www.umti.ca)

Australasian College of Road Safety

Conference

**September 1-2, 2011**

Melbourne Convention and Exhibition Centre

Victoria, Australia

[www.acrs.org.au](http://www.acrs.org.au)

Australasian Transport Research Forum (ATRF)

34th Annual Forum

**September 28 - 30, 2011**

Hilton Hotel

Adelaide, South Australia

<http://www.atrf11.unisa.edu.au/>

University of Manitoba Transport Institute

16th Annual Fields on Wheels

**September 30, 2011**

Delta Hotel

Winnipeg, Manitoba

[www.umti.ca](http://www.umti.ca)

METRANS: Transportation Center

4th METRANS National Urban Freight Conference

**October 12-14, 2011**

Hyatt Regency Hotel

Long Beach, California

<http://www.metrans.org/nuf/2011/index.html>

The 16th HKSTS International Conference of Hong Kong Society  
for Transportation Studies

TRANSPORTDYNAMICS

**December 17-20, 2011**

Hong Kong

Jointly organized by:

Hong Kong Society for Transportation Studies (HKSTS) and

Department of Civil Engineering and Institute of Transport

Studies, The University of Hong Kong

Canadian Transportation Research Forum (CTRF)

47th Annual Conference

**June 3 - 6, 2012**

Mount Royal University

Calgary, Alberta

[www.ctrf.ca](http://www.ctrf.ca)

## *Conference Paper Winners* **2011 Annual Conference**

- The Ron Rice Award for the Best Conference Paper (\$1000):  
**Philip John, James S. Christie and Michael C. Ircha**  
“Places of Refuge: Ports Suitability”
- Runner up Paper (\$500)  
**Serena (Zhongyuan) Tang and Hanna Maoh**  
“Evaluation of Commute Efficiency: Design and Simulation of Future Urban Form  
Scenarios in Windsor, Ontario  
(2011 - 2031)”
- Runner up Paper (\$500)  
**Andre de Palma and Robin Lindsey**  
“Cost Recovery from Road Tolls with Long-Run Uncertainty”

# *CTRF 2012 Annual Conference*

## **CALGARY, Alberta**

Plan to attend the 47<sup>th</sup> Annual CTRF Conference to be held June 3<sup>rd</sup> – June 6<sup>th</sup>, 2012 in Alberta's Picturesque Eastern Slopes' city of Calgary, Alberta. The venue is the modern conference facilities of Mount Royal University, an institution which in 2011 celebrated its 100<sup>th</sup> anniversary, yet only transitioned from college to undergraduate university status in September 2009. Thus, at the conference, you will be visiting one of Canada's oldest, new universities. You will find the well-equipped LEED conference facilities to be without compare.

### **ACCOMMODATION CHOICES (Watch [ctrf.ca](http://ctrf.ca) for Registration Details):**

(1) MOUNT ROYAL UNIVERSITY RESIDENCES (on-site accommodation with car parking provided to guests at no extra charge) Select from a private single room at a conference rate of \$50 plus taxes per night or a limited number of private double rooms (recommended for delegates with spouses) for a conference rate of \$90 plus taxes per night.

Single rooms are in new 4 bedroom condo units having 2 bathrooms, so each bathroom is shared between 2 private rooms and the double rooms have their own bathroom.

(2) BEST WESTERN VILLAGE PARK INN (off-site accommodation, 1804 Crowchild Trail NW, Calgary) For those preferring a standard hotel room, our conference hotel partner is Village Park Inn. Rates are \$119.99 plus taxes for a standard queen unit and \$131.99 plus taxes for an atrium king unit (numbers limited). Appropriate to the number of delegates choosing this option, transportation shuttle service to/from campus will be arranged.

When you come to Calgary in June 2012, you'll discover the magic behind the song, "When it's Spring Time in the Rockies".

Watch for the Call for Papers in the next few months. For conference updates please visit the CTRF website at [www.ctrf.ca](http://www.ctrf.ca).

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## *Bison Debate 2011*

**Thesis: “This House Resolves That High Speed Passenger Rail in North America is a Train Wreck in Slow Motion.”**



### **Bison Transport Debate Participants**

*From left to right: Clarence Woudsma, Bill Anderson, Barry Prentice, Marc-André Roy, Garland Chow*

The 16<sup>th</sup> Annual Bison Debate was a rousing success, with both sides putting forth formidable arguments supporting their positions. The team supporting the thesis was led by Marc-Andre Roy of CPCs Transcom, supported by Garland Chow of UBC who also participated as a metaphor for the passage of time. The team opposing was led by Bill Anderson of the University of Windsor, supported by Clarence Woudsma of the University of Waterloo. As always, the steadfast Moderator was Barry Prentice of the University of Manitoba. Our usual timekeeper, Gordon Tufts, was unfortunately unable to attend; his role was ably performed by Mark Hemmes of Quorum Corporation.

Marc-Andre Roy led off the debate by focusing on the failure of high speed rail in North America in spite of decades of research and proposals – illustrated by the passage of Garland from hippie to disco to Costco over the course of events. He noted that efforts to promote high speed rail in the Windsor-Quebec corridor began in the 1960's and failed to achieve any results except the expenditure of significant sums on research. He also noted the failure of high speed rail proposals in the Calgary-Edmonton corridor, which he suggested was inevitable due to regional cultural characteristics involving pickup trucks.

Bill Anderson responded by touting high speed rail as a Transformative Transportation Technology which should not be judged by conventional cost/benefit standards. He cited Japan as an example, where a 700 km round trip to Tokyo for a business meeting could be easily accomplished in a single day. He suggested that high speed rail transportation enables agglomeration economies which favour creation of economic “megaregions” and that the Windsor-Quebec corridor could evolve in this direction if high speed rail was developed.

Garland Chow followed, demonstrating that he has not forgotten his 60's roots by a spirited rendition of a (the?) Box Tops hit in support of his position. He also noted that it would be impossible to build high speed rail due to the land requirements and NIMBYism; and concluded his arguments by noting that Dick Soberman says it won't work.

Clarence Woudsma compared his opponents to those nay-sayers in the 1850's who said that transcontinental rail was too expensive for Canada; and that as the price of energy continues to rise the use of electrical power for high speed rail will make it more economical than alternatives.

The debate leaders summarized their arguments. Bill Anderson suggested that the door to high speed rail is open just a crack, and you can see the light beyond; Marc-Andre Roy suggested that sensible people have been trying to kick that door shut for a long time, and that it's about time we did it.

The audience participated with many profound insights into the advantages and disadvantages of high speed rail, cows and pickup trucks in Alberta, and other related and unrelated topics. Participants on the debating teams and on the floor sought to curry favour with the Moderator by favourable comments regarding airships, which was surprising since the Moderator does not vote.

Based on the judgement of the audience, the winners of the debate were Marc-Andre Roy and Garland Chow, who will be the incumbent team for next year's debate.

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