# 2016 Joint Conference of the CTRF/TRF Toronto, Ontario



The Joint Conference of the Canadian Transportation Research Forum and the US Transportation Research Forum was held May 1-4, 2016 at the Doubletree by Hilton hotel in Toronto. The theme was "North American Transport Challenges in an Era of Change". The conference was an excellent opportunity to explore a large variety of issues that pertain to Canada and the US.

Program highlights included keynote addresses by Professor Genevieve Giuliano on "Transport Challenges in an Era of Change: a California Perspective", and by the Honourable Steven Del Duca the Minister of Transportation of Ontario. A panel session was held on "Federal Transportation: Current Policy Issues", featuring Catherine Higgins (Associate ADM, Policy, Transport Canada), Carlos Monje Jr. (Acting Under Secretary for Transport Policy, US DoT) and Frank Mulvey (President, ITER Associates). The program also featured 95 research presentations.



Dan Lynch presents Joseph Monteiro with his Honourary Life Membership Certificate

The Bison Transport Debate was held at the University of Toronto's historic Hart House debates room, on the resolution "Economic regulation of the taxi industry is unnecessary and should be abolished". The conference banquet was held at the spectacular 3600 Restaurant at the top of the CN Tower.

One of the technical tours took place at the Billy Bishop Toronto City Airport, which included a tour of the control tower, a ferry cruise around the airport, and demonstrations of the emergency procedures. The second was a tour of the TTC Transit Control Centre, selected parts of the transit network, and the maintenance facility.

Special thanks go to Justin Terry for his work as VP Meetings, and to Matt Roorda for his work as VP Program over the past year. A large cast of others helped with the conference, including Frank Mulvey and Susan Hendrickson from TRF, and Tim Caron, Vijay Gill, Mark Hemmes, Chris Higgins, Joseph Monteiro, James Perttula, Marc-André Roy, Joseph Schulman and Carole Ann Woudsma. And thanks also to the many on-site volunteers! We look forward to your attendance at the 52nd annual conference, May 28-31, 2017 to be held at the Radisson Hotel Winnipeg Downtown.

The Newsletter of the Canadian Transportation Research Forum Le bulletin de le Groupe de recherches sur les transports au Canada



### President's Message

CTRF's 51st Annual Conference in Toronto was a great success! I would like to offer my thanks to the organizing committees of both the CTRF, led by Matt and Justin, as well as the TRF, led by Frank and Susan. Without the help of these, and many more individuals, this joint conference between the CTRF and the US TRF would not have been possible. I would also like to thank all of the volunteers from the University of Toronto, as well as all of you who volunteered to be session chairs and panel leaders. On behalf of CTRF, thank you for making the conference such a success!

Additionally, it's important to remember and support our sponsors, the University of Toronto, Transport Canada, the Ontario Ministry of Transportation, CN, APTA, BNSF, CAA, The St. Lawrence Seaway Management Corporation, and the Association of American Railroads, along with numerous others. Without the continued support of these organizations our annual conference would not be possible. Should you have the opportunity to work with any of these and other CTRF support organizations please let them know how much they are appreciated. Thank you.

As you'll remember this year's conference theme was "North American Transportation Challenges in an Era of Change." I think we can all agree that the conference covered this theme extremely well. That is, with Monday and Tuesday's plenary sessions, as well as the numerous parallel paper sessions, covering all facets of transportation.

I'd also like to thank CTRF's Board, for their continued support, and to welcome Malcolm Cairns as Executive VP. Additionally, we have several new board members; Matin Foomani, Michael Gullo, Trevor Hanson, Adrian Lightstone and Larry McKeown, and two returning members, Barry Prentice and Gordo Tufts. I look forward to serving with them all. And, of course, I'd like to thank Carole Ann Woudsma for all of her hard work and continued support of CTRF.

I would also like to take this opportunity to mention to you some of the initiatives of the board. First and foremost, our next CTRF Annual Conference is to be held in Winnipeg on May 28th through the 31st, 2017. The conference organizers; Gordo Tufts and Barry Prentice are busy planning the conference and of course could use your ideas



**Daniel Lynch** 

and assistance. Furthermore, it was a great success holding a joint conference with the US TRF and we hope to continue working closely with them in the future. Yet another initiative, discussed by the board, was looking into the possibility of a joint conference or some method of collaboration with TAC. This will be an ongoing discussion lead by Marc-André, Malcolm, Gordo, Gerry, and myself. We would appreciate your ideas and input on any of these initiatives. Some additional Board items of note are, the granting of a lifetime membership to Gerry Kolaitis, and welcoming Garland Chow as a Friend of CTRF.

I would be remiss in not mentioning a few other conference highlights, e.g., the great views from the CN Tower at dinner, the several Technical Tours, but more importantly the lively Bison Transport Debate! My thanks to the debate participants; Mario Iacobacci, Bill Anderson, James Nolan and Joseph Schwieterman, and look forward to next year's festivities!

In closing, I feel CTRF has continued to serve as a vital link and networking opportunity in the ever-changing transportation environment. That being said it can only be done with the support of you, our members. To that end, I thank you and urge you not only to stay involved with CTRF, but also to ask your friends and colleagues in the transportation industry to join us as CTRF members and conference attendees. Lastly, should you have any suggestions, comments, or initiatives regarding the future of CTRF, please feel free to contact me at: dan.lynch@dal.ca.

Dr. Dan Lynch

CTRF President



### Message du président

La 51e conférence annuelle du GRTC à Toronto a connu un grand succès! Je voudrais remercier à la fois le comité organisateur du GRTC, mené par Matt et Justin, et celui du TRF, dirigé par Franck et Susan. Sans leur aide et celle de nombreuses autres personnes, cette conférence conjointe du GRTC et du US TRF n'aurait pas été possible. Je tiens aussi à exprimer mes remerciements aux bénévoles de l'université de Toronto, de même qu'à tous ceux d'entre vous s'étant portés volontaires pour présider des séances et des ateliers. Au nom du GRTC, merci d'avoir fait que cette conférence connaisse un si grand succès!



**Daniel Lynch** 

De plus, il est important de se rappeler et de soutenir nos commanditaires, à savoir l'université de Toronto, Transports Canada, le ministre des Transports de l'Ontario, le CN, l'APTA, le BNSF, le CAA, la Corporation de gestion de la voie maritime du Saint-Laurent, l'Association of American Railroads et de nombreux autres. Sans l'appui constant de ces organisations, notre conférence annuelle n'aurait pas pu se tenir. Si vous avez l'occasion de travailler avec quelques unes d'entre elles et d'autres qui nous soutiennent, veuillez leur réaffirmer combien elles sont appréciées. Merci.

Comme vous le savez, la conférence de cette année avait pour thème « Les défis des transports en Amérique du Nord dans une ère de changement. » Je pense que nous pouvons tous convenir que la conférence a très bien couvert ce thème. Et ce, en raison des séances plénières de lundi et de mardi, de même que des nombreuses sessions simultanées de présentation des articles, qui ont traité de toutes les facettes des transports.

Je voudrais également remercier le conseil d'administration (CA) pour son appui continu et Malcolm Cairns en sa qualité de VP exécutif. Nous avons, en outre, plusieurs nouveaux membres au CA: Matin Foomani, Michael Gullo, Trevor Hansen, Adrian Lightstone et Larry Mckeown ainsi que, de retour, Barry Prentice et Gordo Tufts. J'ai hâte de travailler avec eux tous. Je voudrais aussi présenter mes remerciements à Carole Ann Woudsma pour tout son labeur et son soutien assidu au GRTC.

Je profite de cette occasion pour vous faire part de certaines initiatives du CA. D'abord et avant tout notre prochaine conférence annuelle qui se tiendra à Winnipeg, du 28 au 31 mai 2017. Les organisateurs, Gordo Tufts et Barry Prentice, sont déjà à l'œuvre, planifiant la

conférence et, bien sûr, prêts à recevoir toute idée ou assistance de votre part. Par ailleurs, le succès qui a marqué la conférence tenue conjointement avec le TRF américain nous incite à continuer à travailler étroitement ensemble à l'avenir. Une autre initiative abordée par le CA consiste à étudier la possibilité d'une conférence conjointe ou toute autre forme de collaboration avec l'ATC. Cette réflexion sera menée par Marc-André, Malcolm, Gordo, Gerry et moi-même. Nous apprécierions vos idées et contributions pour de telles initiatives. D'autres sujets à traiter par le CA: l'octroi du statut de membre à vie à Gerry Kolaitis et l'accueil de Garland Chow comme Ami du GRTC.

Je m'en voudrais de ne pas mentionner le spectacle qu'offre le haut de la Tour CN au dîner, les visites techniques et, plus important encore, le dynamique débat de la Coupe Bison Transport! Je remercie les participants, Mario Iacobacci, Bill Anderson, James Nolan et Joseph Schwieterman, et espère vivement vivre cet événement festif l'an prochain!

Enfin, je pense que le GRTC a continué à servir de lien vital d'opportunités de réseautage dans un environnement des transports en constante mutation. Cela dit, le succès ne peut être atteint que grâce à vous, nos membres. En ce sens, je vous remercie et vous invite fortement non seulement à demeurer impliqués dans le GRTC, mais aussi à convaincre vos amis et collègues dans l'industrie des transports à y adhérer et participer aux conférences. En conclusion, si vous avez des suggestions, commentaires ou initiatives concernant l'avenir du GRTC, n'hésitez pas à me contacter à : dan.lynch@dal.ca

Dr Dan Lynch

Président du GRTC

## CTRF Plenary Session May 3, 2016

Report by: Jim Frost

#### **Catherine Higgins, ADM Transport Canada**

The session was very timely in terms of federal transportation priorities given a new government and the release of the Canadian Transportation Act Review (CTAR). The minister had recently spoken about it at the Economic Club of Toronto, where he made the point that the transport portfolio is now considered an "economic" portfolio.

With respect to CTAR, it was pointed out that the previous report had been issued 15 years ago. The Review represents a comprehensive source of independent advice, and notably, it was commissioned by the previous government, but tabled by the current one. The Report looks at individual modes, but is also multi-modal. It makes the point that evidence-based decision-making is critical. It also seeks to encourage innovation and to improve the system's agility and response to disruptive technology. The Chair, David Emerson, also challenged stakeholders to look ahead 25-30 years.

With respect to the new government, emerging themes include 1) trade corridors to global markets; 2) green innovative transportation; 3) the traveler their needs; and 4) waterways, coasts, the North — issues and opportunities. The specific mandate from the Prime Minister includes 1) the strategic placement of investment beyond the "Gateway" lens, looking at the whole supply chain, the issues of resiliency, safety and security and social license. The PM wants a system that is innovative, adaptable and can respond to opportunities.

An engagement process began in April, which will last from May-September. It will use Round Tables, as well as online and social media tools.

#### Carlos Monje Jr. – USDOT

Mr. Monje described the FAST Act, which applies to 43 states. It is a long term 5 year Bill which maintains a funding profile for freight and transit. It is a large new formula that includes a discretionary fund. Federal funds also include multimodal projects and additional tools for projects that can be partnered with the private sector. They are also setting up the Innovative Finance Bureau.

The intellectual case for FAST is the US will have 70 million more people by 2045. DOT's first priority is safety for all modes; it is looking at what's working and what needs to be improved and updating the regulatory process. Looking to the future, they consider autonomous vehicles to be a real "game changer" and are investing \$40 million in the "Smart Cities" initiative.

#### Frank Mulvey - Washington consultant

Mr. Mulvey is retired from the Surface Transportation Board. Since the Staggers Act of 1980, US railways have been doing well. Rates have fallen more than 50% since it was introduced and productivity gains have been passed on to shareholders. At present, however, coal traffic represents 40% of rail traffic but 20% of revenue. Coal could be exported in the future, but it is presently not competitive because of the cost to get it to ports. Mr. Mulvey is of the view that oil by rail will probably decline because pipelines "will" be built. He believes containers are not profitable for rail but they represent an area of growth. They are somewhat at risk, however, from technological change such as the potential for driverless trucks. The expanded Panama Canal also presents a challenge, for both western and eastern-based railroads, because of the potential shift of traffic from west coast to Gulf and east coast ports.

Mr. Mulvey also discussed a recent TRB Report, which, he contends, relies on outdated technology. He cited the issue of true railroad costs and called for DOT to test benchmarks for various commodities. He suggested that if a rate is challengeable then it should go to arbitration. US railroads have opposed this but it works in Canada. He also believes the issue of mergers should be moved from the STB to Justice.

He does not believe this is the time to tamper with regulatory process but rather test some ideas.

#### **Questions**

A number of questions arose after the presentations. These included the issue of marine safety — reality vs perception.

Another questioner pointed out some of the differences between the last CTAR and the recent report. It was suggested that there is an opportunity to build an evidence-based approach towards infrastructure investment, which has largely been politically-driven in the past.

The Executive Vice-President of CTRF offered the organization's assistance in this regard and indicated CTRF will issue a series of policy briefs by autumn.

#### Conference Paper Winners 2016 Annual Conference Sponsored by the Calgary Airport Authority

The Ron Rice Award for the Best Conference Paper (\$1000)

Garland Chow and Geetansh Kakkar

Simulating Roadside Safety Inspection Benefits Enabled by Alternative V2I rescreening Technologies

Runner up Paper (\$375)

Bern Grush and John Niles

How Cities Can Use Autonomous Vehicles to Increase Transit Ridership and Reduce Household Vehicle Ownership

Runner up Paper (\$375)

**Barry Prentice and Robert Knotts** 

Sustainable Transportation: Airships versus Jet Airplanes





Marc-André Roy presents the awards to Garland Chow and Barry Prentice

# Award Winners CTRF Scholarship Competition 2016-2017

#### Canadian Pacific Railway Scholarship

Derek Wilson, University of Oxford

#### **CN Scholarship**

Auja Ominski, University of Manitoba

#### Transport Canada Scholarship in Safety and Security

Salman Kimiagari, Université Laval

#### Transport Canada Scholarship in Safety and Security

Brendan McPhee, University of New Brunswick

### Transport Canada Scholarship in Economics, Efficiency and Competitiveness in Transportation

Mahmudur Rahman Fatmi, Dalhousie University

#### Transport Canada Scholarship in Sustainable Transportation

Faizul Mohee, University of Waterloo

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



Brendan McPhee being congratulated by Marc-André Roy

### Keynote Speakers

#### The Honourable Steven Del Duca

#### Report by: Chris Higgins

At the joint CTRF/TRF conference this year, attendees saw a keynote delivered by the Honourable Steven Del Duca, Minister of Transportation of Ontario. In his remarks, Minister Del Duca spoke to the many challenges in the transportation sector in Ontario, and the changes underway to overcome them.

Of these, congestion, decades of under-investment, and climate change present the biggest obstacles to Ontario's transportation future. In response, the Government of Ontario is spending \$31.5 billion on critical infrastructure, including funding for rapid transit lines, cycling infrastructure, and highway projects around the province. \$16 billion of this money is to be spent within the Greater Toronto and Hamilton Area, with \$15 billion for projects outside the region. Key highway projects include a High Occupancy Toll (HOT) lane pilot project on the Queen Elizabeth Way and an eastward extension of the Highway 407 toll road, which will be owned by the Province.

Minister Del Duca noted that while often risk-averse, there are significant changes underway within the ministry itself. Over the past 100 years, it has gone from the highways department to a much larger and more multi-modal entity. And although change often presents challenges, the ministry has a strong sense that it needs to not only catch up in terms of investing in infrastructure, but build for the future to keep up with the demands of the significant new population and employment growth that is slated to occur in Ontario over the next 25 years.

The Ministry of Transportation is also taking a proactive approach to technological innovations such as driverless cars, where a 10-year pilot project for automated vehicles has been created. While Ontario has always maintained a strong relationship with the automobile industry, this initiative demonstrates the Ministry's commitment to future planning and positioning the province to capitalize on new sources of economic development.

According to Minister Del Duca, these changes reflect a larger change in values amongst Ontarians. It was not long ago that transportation for most individuals consisted of travel primarily by personal automobile. However, today's Ontario is multi-modal, with younger generations showing different preferences for travel than those of their parents and this multi-modality is seen as key to Ontario's competitiveness in the future. Whether it be travel on light rail or bus rapid transit, Regional Express Rail, cycling, or by driverless car, it is the goal of the Ministry to work with stakeholders and the public to ensure future generations have more travel options and opportunities.

Taken together, Minister Del Duca envisions the changes and investments underway at the Ministry contributing to an Ontario that will be more multi-modal, environmentally sustainable, and economically prosperous for generations to come.

#### Professor Genevieve Giuliano, USC, Director of METRANS

#### Report by: Jim Frost

Professor Giuliano noted that California has been a historical leader in environmental policy and climate change policy. Governor Brown has ordered the state to develop a more sustainable freight system. This has implications for ports and supply chains, and will tend to favour trains vs trucks. There are rising costs of compliance, however, and some uncertainties for Distribution Centres and warehouses, particularly those located in the Inland Empire region of California. There are also major barriers to infrastructure improvement.

### Keynote Speakers

#### Professor Genevieve Giuliano, USC, Director of METRANS...continued

A very big concern are changes taking place in ocean shipping, where there is a battle for market share between west and east coast ports. Presently, the west coast has a 50% share, with the east coast at 42%, and the Gulf at 8%. This is expected to change with the opening of the expanded Panama Canal in June 2016. The global container industry is also being impacted by changing alliance structures, predatory pricing to increase market share and massive cost shedding, which is leading to the introduction of larger vessels to achieve scale economics.

The "big ship problem" generates huge peaking and land side costs go up. Larger vessels are great for carriers, and not so great for customers, because beneficial cargo owners (BCOs) will have to keep more inventory. The jury is also out as to whether big ships are good for ports, although they all want them, for fear another port will attract them. There was a suggestion that there might be an opportunity for smaller, niche carriers, and that BCOs might actually save money with faster transit times.

Other changes affecting the west coast container industry include the recovery of trade in the post-recession period, the upcoming opening of the Panama Canal expansion, and investments in east and Gulf ports. These changes have widespread implications for North American supply chains.

Dr. Giuliano also spoke about the situation in the fall of 2014 which she likened to the "Perfect Storm".

Ports were coping with increased trade, the juggling of carrier alliances, the introduction of 12-15,000 (not 18,000 yet) TEU vessels, drayage and labour shortages, and massive congestion on the docks. It was a wake-up call for the ports, which established the Supply Chain Optimization Group or SCOG. It established a number of Working Groups, and has subsequently dealt with many contentious issues, including PierPass, appointment systems, turn times and how to measure progress. She asked rhetorically, however, once the crisis is over, is there motivation to keep going?



#### 2016-2017 CTRF Board of Directors

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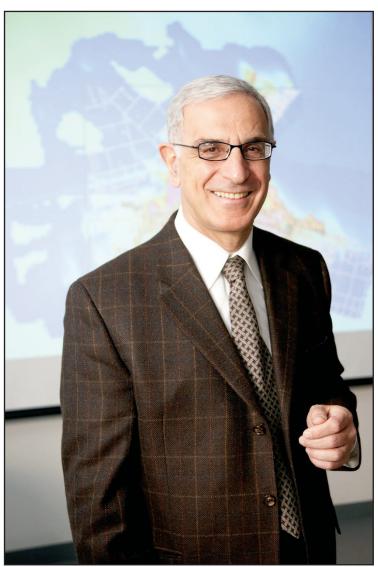
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### *Dr. Pavlos Kanarolgou* 1948 - 2016

One of the giants of Canadian human geography has left us far too soon with the passing of Pavlos Kanaroglou on May 13, 2016. Pavlos was a faculty member at McMaster University for a quarter century and had recently moved on to become Professor (Emeritus). He was a Tier 1 Canada Research Chair in Spatial Analysis from 2002 to 2015, the Director



of the McMaster Institute for Transportation and Logistics from its founding in 2007 until the present and the founder and leader of the Centre for Spatial Analysis at McMaster. More recently, he had the role of Principal Investigator for the \$2.4 million "Social Costs and Benefits of Electric Mobility in Canada" project funded by SSHRC and Automotive Partnership Canada. His record of peer-reviewed publications is lengthy with several foundational works and he served on multiple editorial boards and national and international committees. His interests were diverse and included the interplay between transportation and land use, the health impacts of vehicular emissions, the use of quantitative techniques in spatial analysis and many others.

While the list of achievements is impressive, the man himself was even more so. He came from a family of modest means and was heavily influenced by his childhood in a working class Athens, Greece neighbourhood. He grew up to be a tremendously determined person and a superb leader of people. He had great vision and clarity and stuck strongly to his convictions. Colleagues depended on him for advice and many of Pavlos' students will tell you that he changed their lives. And there were many

students he mentored: 13 PhD students, 32 Master's students and 15 post-doctoral fellows along with the thousands of undergraduate and graduate students he taught over the years. Pavlos lived in Hamilton, Ontario from the mid-1970's onward and was a concerned and involved local citizen. He leaves behind his wife Vina, daughter Niki and son Savas. MITL was a great passion of Pavlos' and we see the future development of MITL as an important component in celebrating and preserving his legacy.

As requested by his family, donations in memory of Pavlos can be directed to the McMaster Institute for Transportation and Logistics through <a href="https://www.ifundmac.ca">www.ifundmac.ca</a>



# 2016 Bison Transport Debate

Report by: Mark Hemmes

This year's Bison Transport Debate resolution was "Economic Regulation of the Taxi Industry is Unnecessary and Should be Abolished". The incumbents, Mario Iacobacci and Bill Anderson won the coin toss and therefore defended the resolution leaving the challengers James Nolan and Joseph Schwieterman against the position. Barry Prentice once again served as moderator and Malcolm Cairns as timekeeper.

Mario Iacobacci opened by contending that in today's world the choices and options for public transportation are far greater than in the past and that the structure of the current taxi industry amounted to the setting of quotas, limiting supply and fixing prices. While a rationale for limiting the numbers of taxis existed in the past, the industry has evolved to one with limited capacity with high economic rent. He questioned the need to limit supply and contended that with the advent of technology, specifically social media, market pricing signals become possible when shortage of supply becomes a challenge.

Mario also contended that the existing regulatory regime stifles innovation, citing technology used by UBER as an example of the new age method of allocating supply to areas of greater demand and managing supply more effectively. Mario mentioned the success other transportation modes have enjoyed since shedding the regulatory burden on supply and price such as airlines, trucking and railways, where deregulation fostered productivity growth, as well as areas where deregulation has not been employed such as public transit, where fixed pricing still rules and statistics suggest that productivity has declined.

James Nolan began the antithesis stating that regulation in the taxi industry has worked, and is a function of its place as a public utility serving the public good. He suggested that the taxi industry is a natural monopoly and as such, if it were to price at a competitive level they would lose money and force the government to subsidize it. Also, as a natural monopoly, taxis are no different from any other public utility where prices are regulated. He allowed that the situation could change based on the size and demand in certain locations, but that the decision to deregulate must be evidence based using cost structure as the primary measuring tool.

James said that the current structure is stable and should be allowed to remain, pointing to already low driver wages and questionable industry profitability. He also pointed to evidence that UBER drivers are not properly screened, citing instances where an UBER driver shot and killed six people, and another where an UBER driver ran over a pedestrian. He reiterated his contention that the taxi industry structure has worked, that drivers work for low pay and at high risk and they do not need someone to come in and take what little they have.



Bill Anderson began the second round in support of the resolution by stating that he must change sides in the debate, as he came to the realization that regulation means that the state sets the optimum price with the optimum number of service providers. He explained that economists, engineers and university professors perform mathematical programming of this kind and as UBER would no longer need those services any longer and would let the market determine who needs taxis and where they should be, this would take work away from him and his compatriots. He quickly confessed that he was not serious, and that economic regulation comes about because at some point something went wrong in the system and the public pressure said it needed to be fixed with regulatory oversight.

# 2016 Bison Transport Debate

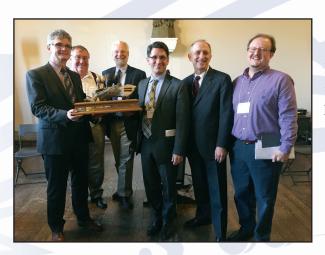
Consequently, the impulse to regulate creates a "class" of incumbents with a sense of entitlement whose livelihood depends on the continuance of that regulation. He concluded that a regulatory environment should not be the justification for protecting jobs.

Bill made the case that information asymmetry has evolved to the point where the current system is now behind the times and that technology allows an approach to advance the analytical optimization processes that were the purview of the past. UBER is but one facet of what he referred to as "high mobility urbanism". He contended that many options for ride sharing are in place today and if any entrant that tries to raise prices too high will cause the market to shift and that entrant will be pushed out. He concluded by stating that the goal should not be the protection of incumbents or the creation of monopolies but should be the creation of a new kind of mobility and the use of new technology used by a new generation of people who think differently and needs no economic regulation.

Joseph Schwieterman countered in the second round by stating that we take the role of taxis for granted. He asked, "Who makes a living driving their customers away? — A taxi driver". In this industry we have two choices: the UBER driver who is offering a product based on yield management and the other, a stable product. With UBER you must always consider what the cost might be but with a cab you already know. What if public transit shifted to yield management model and you always had to wonder what it is going to cost this time when you get on a bus? He suggests that the two systems must learn to coexist. For those who do not have access to a smart phone or the technology to access UBER the choice is limited where the taxi system is an extension of the public transit system. He pointed to the fact that in 50 major North American cities where UBER is being considered, deregulation of the taxi industry is not part of the discussion, a recognition that taxis are an essential part of those cities transportation system. He further suggested that in cities where traffic congestion is an issue, an unregulated taxi system would be difficult to manage, contributing to further congestion.

The teams' closing statements followed questions and comments from the audience. James Nolan summarized by stating that evidence exists showing the taxi industry is a natural monopoly. He added that if an unregulated party were allowed to run unfettered in some cities core, congestion would become an even greater problem. He further contended that with regulation comes greater safety. Taxis are essential and part of the fabric of society and pairs well with public transit, citing a number of literature references where taxis figure prominently.

In defending the proposition, Mario Iacobacci closed by reminding the audience that this was about economic regulation, not safety regulation. He stated that this is about the number of licenses and the setting of price. The contention that regulation is required because these are not perfect markets and are dominated by natural monopolies should be viewed in the perspective that times have changed with the advent of new technology. He added that there has been an increase in the number of options available, while dismissing the contention that economic regulation is needed to protect drivers and is a function of social policy.



In a narrow vote by the audience, the defending team of Mario Iacobacci and Bill Anderson were chosen as the winning team in defending the proposition.

### CTRF 52nd Annual Conference Winnipeg, Manitoba May 28-31, 2017

People have been meeting at the confluence of the Assiniboine River and the Red River for more than 6000 years ... and now, finally, you're invited!



The Forks, a National Historic Site, has been the meeting place for Aboriginal peoples, European fur traders, Métis buffalo hunters, Scottish settlers, riverboat workers, railway pioneers, and tens of thousands of immigrants from around the world.

The city of Winnipeg grew up around the transportation node formed by the rivers, railroads, highways, and airways. The trade and transportation hub of Winnipeg has been referred to as Chicago North.

It is therefore appropriate for the Canadian Transportation Research Forum to convene its 52nd Annual Conference close to The Forks, at the Radisson Hotel Winnipeg Downtown, located 3 short blocks from the world famous intersection of Portage & Main. A block of rooms has been reserved at \$149 per room-night. Please book early to avoid disappointment.



The Conference is slated for Sunday, May 28 — Wednesday, May 31, 2017, but you're welcome to arrive early and/or stay late. There's a lot to see and do in Winnipeg, and Manitoba.

Attractions include the Royal Winnipeg Ballet, Manitoba Opera, Winnipeg Symphony Orchestra, Winnipeg Art Gallery, Canadian Museum for Human Rights, Royal Aviation Museum of Western Canada, Winnipeg Railway Museum, Lower Fort Garry National Historic Site, Royal Canadian Mint, CFL Blue Bombers, Winnipeg Goldeyes baseball, NHL Jets, AHL Moose, and Assiniboine Park Zoo.

MTS Centre, home of the NHL Winnipeg Jets and the AHL Moose, is the 4th busiest entertainment venue in Canada. It is 1 block from the Radisson conference hotel. Check out what's happening before and after conference dates. <a href="http://www.mtscentre.ca/">http://www.mtscentre.ca/</a>





### 52e conférence annuelle du GRTC Winnipeg, Manitoba 28-31 mai 2017

Des personnes se retrouvaient à l'embouchure de la rivière Assiniboine et de la rivière Rouge depuis plus de 6000 ans...et, enfin maintenant, vous y êtes invités!

La Fourche, Site historique national, a été le lieu de rencontre de peuples amérindiens, de marchands de fourrure européens, de Métis chasseurs de bisons, de colons écossais, d'équipages fluviaux, de pionniers des chemins de fer, et de dizaines de milliers d'immigrants de partout dans le monde.

La ville de Winnipeg a grandi autour du nœud de transport formé par les deux rivières, des chemins de fer, des routes et des liaisons aériennes. On a qualifié de Chicago du Nord le centre nodal du commerce et des transports de Winnipeg.

Il est donc des plus approprié, pour le Groupe de recherches sur les transports au Canada, de se retrouver, pour sa 52e conférence annuelle, près de la Fourche, à l'hôtel Radisson Downtown, situé à seulement trois blocs de la fameuse intersection des artères Main et du Portage. Un lot de chambres y a été réservé au tarif de 149 \$ la nuit. Veuillez réserver tôt pour éviter tout désagrément.



La conférence est programmée du dimanche 28 au mercredi 31 mai 2017, mais vous êtes les bienvenus si vous arriviez plus tôt et/ou quittiez plus tard. Il y a tellement à voir à Winnipeg et au Manitoba.

Les points d'intérêt incluent le Royal Winnipeg ballet, le Manitoba Opera, l'orchestre symphonique de Winnipeg, la Winnipeg Art Gallery, le musée canadien des droits de l'homme, le musée royal national de Lower Fort Garry, la Monnaie royale canadienne, les Blues Bombers de la LCF, les Winnipeg Goldeyes baseball, les Jets de la LNH, le Moose de la LAH et le Parc zoologique Assiniboine.

Le Centre MTS, domicile des Jets de la LNH et du Moose de la LAH, se situe au 4e rang des lieux de divertissement les plus achalandés du Canada. Il est localisé à un bloc de l'hôtel Radisson, site de la conférence. Soyez attentifs aux événements s'y déroulant avant et après la conférence. <a href="http://mtscentre.ca/">http://mtscentre.ca/</a>





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