

## Sponsors

The conference organizing committee wishes to thank our sponsors whose generous support has made this conference possible.

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We would also like to express special thanks to TransLink who provided free transit passes to all conference attendees.

**Thank You!**



## 2005 ITE Quad and WCTA Annual Conference



**April 7 - 9, 2005  
Hyatt Regency Hotel  
Vancouver, BC**

**Hosted by the  
Canadian Institute of Transportation Engineers  
and  
Western Canada Traffic Association**



**10:30 – 12:00**

**16 Vehicle Efficiency and Economics - Plaza A**

- Puget Sound GPS-Based Pilot Pricing Project Traffic Choices Study: *Matthew Kitchen and Michael Wieck, PSRC, Siemens ITS*
- Reducing Passenger Vehicle Emissions - City of Vancouver Climate Change Action Plan: *Don Klimchuk, City of Vancouver*
- Rapid Transit for the Northeast Sector: *Clark Lim, TransLink*

**17 There's More than Road Transport - Plaza B**

- Airport Landside Roadway Capacity Analysis with Micro-simulation: *Russ Gomke, The Transpo Group*
- Waterfront Station: The Ultimate Multi-modal Transportation Hub: *Lon LaClaire, City of Vancouver*
- Transportation Security – Lower Mainland Initiatives: *Ian Steele, PBA Engineering Ltd.*

**18 Roundtable Discussion 3 - Plaza C**

**Public/Private Funding Partnerships -  
Moderators: John Pump, ICBC and David Lee**

**12:00 – 1:30**

**Conference Closing Session**

## **Building Inside the Box**

### **Introduction**

Welcome to the 2005 Institute of Transportation Engineers Quad Conference and Western Canada Traffic Association Annual Conference at the Hyatt Regency Hotel in Vancouver, BC.

The Conference Committee has put together a wide ranging program of 455 technical papers, 3 roundtable discussions and 2 associated courses for this conference.

The focus of the conference is not on any one technical area, rather it is on working towards innovative ideas and solutions within the reality of external constraints that we face on both sides of the border.

We have to address non-transportation issues such as sustainability, community impact and fiscal constraints. This should not mean reduced requirements that compromise safety, operational efficiency or the ability to handle future travel demands. We have to focus on doing better with less, while attempting to address more issues, “Innovative Transportation Ideas for a Constrained Reality” is the theme of our conference.

Our Keynote Speaker is Gordon Price. He is a former City of Vancouver Councillor and board member of both the GVRD and GVTA, as well as Adjunct Professor in the School of Community and Regional Planning at UBC, and a Lecturer on transportation and land use for the City of Portland and Oregon State University.

His presentation will highlight “**New-Age Engineering in an Old-Fashioned World** - *How transportation engineering has the opportunity to meet the challenges of our time, but doesn't get the chance, given how the public and politicians are stuck in the past.*”

We hope that you all take home some ideas that will help you to “Build Inside the Box” on projects in your local area.

Conferences are not “all work” so we also hope that you will enjoy yourselves while you are in Vancouver.



OFFICE OF THE MAYOR

LARRY W. CAMPBELL  
MAYOR

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March 2005

## GREETINGS

On behalf of the City of Vancouver I want to welcome delegates to the 2005 ITE Quad Conference and WCTA Annual Conference.

Vancouver prides itself on its efforts to ensure our citizens enjoy the best possible transportation system, with a priority on pedestrians, cycling and rapid transit. In the years ahead, we will be investing billions of dollars across the region to ensure rapid and environmentally-sustainable expansion of our transportation infrastructure to move goods and people.

When your business is complete, I hope you can take the time to sample all the cultural and tourist attractions our region has to offer.

Yours truly,

Larry W. Campbell  
MAYOR

## Saturday April 9<sup>th</sup>

**7:30 – 8:45**

**Continental Breakfast – Trade Show Area**

**7:30 - 9:00**

**Registration - Lobby**

**8:45 – 10:15**

### **13 Planning of Traffic and Movement - Plaza A**

- Planning of Traffic and Movement - a Case Study of Arterial Access Control on a Commercial Arterial: *Paul Krawczyk, City of Bellevue*
- PORTAL: An On-Line Regional Transportation Data Archive with Transportation System Management Applications: *Robert Bertini, Portland State University*
- The Timeline on the Inevitable: A Study on the Sustainable Economics of Seattle's Downtown Highway Capacity: *Kamala Rao, Hamilton Associates*

### **14 Capacity Management - Plaza B**

- Short Cycle Length Benefits: *Roger Allington, Alaska DOT&PF*
- Why All Your Traffic Projections Are Wrong: *Stuart Ramsey, City of Burnaby*
- Traffic Management Center Design for Small/Medium Size Agencies: *Hicham F. Chatila, The Transpo Group*

### **15 Community Planning and Strategies - Plaza C**

- Lynnmour/Inter-River Neighbourhood Redevelopment - Planners and Engineers Coming Together: *Kevin Volk and Tamsin Guppy, District of North Vancouver*
- Transportation Strategies for Vancouver's Model Sustainable Community: *Dale Bracewell, City of Vancouver*
- Beyond Auto: Moving People not Cars: *Tony Mazzella, and Kate King, Seattle Department of Transportation*

**10:15 – 10:30**

**Refreshment Break – Trade Show Area**

## **11 Alternative Modes: Considering Other Road Users - Plaza B**

- The Business Case for Active Transportation: *Francine Godin, Go for Green*
- Bicycle Parking Manual: *John Luton, Capital Bike and Walk Society*
- Different Boxes, Different Rules – Traffic Management Plans for Schools in British Columbia and the UK: *Tim Barton, Bunt & Associates*

## **12 Roundtable Discussion 2 - Plaza C**

**Speed Management - Moderators: Dr. Tarek Sayed, UBC and Insp. Norm Gaumont, RCMP**

**5:30 - 11:00**

### **Dinner and Entertainment**

Dinner at the Dockside Restaurant in the Granville Island Hotel, 1253 Johnson Street on Granville Island.

Theater “Improv” at The New Revue Theater, 1253 Johnson Street, Granville Island.

Please note that there is very restricted parking on and around Granville Island, you have a free transit pass.

Please see the map inside the back cover for directions.

## **Conference Organizations**

The **ITE Quad Section Meeting** has been an ITE tradition on the west coast for many years. On a rotating basis, the four ITE sections in Oregon, Washington, Vancouver and Vancouver Island host an annual conference to discuss transportation issues of mutual concern.

The conference is an opportunity for Transportation Professionals from across the region to discuss and share ideas and experiences with their peers.

**Institute of Transportation Engineers** - Founded in 1930, the Institute of Transportation Engineers (ITE) is an international, individual membership technical association of more than 16,000 engineers, planners, and other practitioners involved with the safe and efficient movement of people, vehicles and goods on streets, highways, and transit systems in over 90 countries.

**Canadian Institute of Transportation Engineers, ITE’s District 7**, serves ITE Members in Canada. The Greater Vancouver Section is one of two sections in British Columbia, with a membership of approximately 185. For information about CITE Membership please contact our Secretary, Borg Chan, P. Eng, PTOE, (bchan@gdhamilton.com)

The **Western Canada Traffic Association (WCTA)** is an organization of traffic professionals from western Canada. Its membership includes practitioners from the fields of engineering, enforcement, education, environment and economics.

WCTA membership is informal and is comprised of staff of government organizations and companies involved in the field of transportation. For information about WCTA please contact Norm Nikkel (nikkeln@dnv.org).

# Committees

## Conference Co-chairs

**Jo Fung**, Bunt & Associates; **Steve Brown**, CH2M HILL;  
**Mavis Johnson**, Canadian Traffic Safety Inst.

## Facilities

**Thomas Kwan**, Hamilton Associates; **Norm Nikkel**, District of North Vancouver

## Technical

**Kanny Chow**, Hamilton Associates; **Kevan Khoshons**, Delcan;  
**Mavis Johnson**, Canadian Traffic Safety Inst.

## Registration

**Gord Foy**, CH2M HILL; **Nikki Scott**, Urban Systems; **Connie Tang**, Delcan; **Wisdom Fong**, Creative Transportation Solutions

## Publicity/Media

**Kanny Chow**, Hamilton Associates; **Vikki Ngan**, City of Richmond; **Nikki Scott**, Urban Systems; **Richard James**, Richard James & Associates

## Finance

**Borg Chan**, Hamilton Associates

## Sponsorship

**Vikki Ngan**, City of Richmond; **Daniel Fung & Felipe Rodriguez**, McElhanney Consulting Services; **Wali Memon**, City of Vancouver; **Mavis Johnson**, Cdn. Traffic Safety Inst.

## Social

**Ron Wong**, Bunt & Associates; **Laurel Richl**, UMA;

## Trade Show

**Norm Nikkel**, District of North Vancouver; **Paul Binotto**, Astrographics Industries Ltd.

## Secretary

**Nikki Scott**, Urban Systems

## Website and Brochure Production

**Richard James**, Richard James & Associates

## 1:30 – 3:00

### 7 Measuring Road Safety - Plaza A

- Planning for Sustainable Road Safety: *Gordon Lovegrove and Dr. Tarek Sayed, UBC*
- Community and School Traffic Safety Partnership, Measuring Traffic Safety Performance in Portland, Oregon: *Christopher M. Monsere, Portland State University*
- Collisions Cause Analysis, Reconstructing Collisions: *Dr. Francis Navin, Synectics*

### 8 Designing Lines: Dealing with Issues Using Design - Plaza B

- Getting it Right - Some Common Issues for Traffic Operations: *Richard James, Richard James & Associates and Jon Conquist, BC Ministry of Transportation*
- Traffic Safety and the Older User: *Margaret Gibbs, Hamilton Associates*
- ADDCO SMART Work Zone: *David Berkman, ADDCO*

### 9 Transit: Keeping Pace - Plaza C

- Conceiving and Planning a New Model of Urban Bus: *Brian Mills, TransLink*
- Measuring the Effects of Traffic Congestion On Transit Signal Priority Call Distances: *Robert Bertini, et al. Portland State University*
- Univ. of BC Transit Terminal Operational Study using Microsimulation: *Kean Lew and Jim Dale, PTV America; Hansel Wang, TransLink; William Baumgardner, ARUP*

## 3:00 – 3:15

### Refreshment Break - Trade Show Area

## 3:15 – 5:00

### 10 The Design Process for Other Users - Plaza A

- Kingsway and Knight Neighbourhood Centre Shopping Area, Public Realm and Pedestrian/Traffic Improvements Plan: *Melina Scholefield, City of Vancouver and Frank Ducote, Frank Ducote Urban Design Consulting*
- Putting Pedestrians First; Pedestrian Network Study in Prince George: *Erica Geddes, Hamilton Associates; Glenn Stanker, Terry Fjellstrom, and Wendy Nordin, City of Prince George*
- Downtown Streetcar Planning in Vancouver's Core, *Dale Bracewell, City of Vancouver*

**10:15-10:30**

**Refreshment Break - Trade Show Area**

**10:30 - 12:00**

**4 Design Review: The Results - Plaza A**

- Lower Ganges Road, Salt Spring Island Safety and Operational Analysis: *Barbara Thomas and Rodrigo Disegni, CH2M HILL*
- Highway 10, Surrey, British Columbia - Widening an Arterial Highway Through a Sub-Urban Environment: *Alexander Izett, UMA Engineering Ltd.*
- Signing Issues - Making Signs Work: *Richard James, Richard James & Associates and Ed Miska, BC Ministry of Transportation*

**5 Road Safety for Vulnerable Road Users - Plaza B**

- Audible Pedestrian Signals: a Review of Canadian Practices: *Sarah Rocchi, Hamilton Associates and Bill Williams, City of Surrey*
- Community Audits for Cycling and Walking: *John Luton, Capital Bike and Walk Society*
- Evaluating the Effect Of Advanced Warning Flashing Lights On Driver Speed Compliance In School Zones: *Arshad Syed and Rashad M. Hanbali, CTS Engineers Inc.*

**6 Roundtable Discussion 1 - Plaza C**

**Roundabouts - Moderator: Julian Rozental, ICBC**

**12:00 - 1:30**

**Lunch and Presentations - Regency Ballroom A & B  
3rd Floor**

**Keynote Speaker - Gordon Price,**  
**“New-Age Engineering in an Old-Fashioned World”**

ITE International VP Candidates Presentations

ITE District Presentations

WCTA Presentation

## **Trade Show Participants**

The following companies are represented at the Trade Show in the Conference Lobby (as of March 21<sup>st</sup>).

- 3M Company
- Addco
- Astrographic Industries Ltd.
- Carmanah Technologies
- Coral Sales Company
- Creative Transportation Solutions
- Econolite Control Products
- EIS Electronic Int. Systems
- Garrettcom Inc.
- Inprotect Systems
- Intelligent Traffic Equipment Marketing Ltd.
- International Road Dynamics.
- Knight Safety Limited
- PTV America, Inc.
- Tacel Ltd.
- TES Information Technology
- Valley Traffic Systems

The suppliers invite you to visit their booths (see inside back cover), please take this opportunity to see and discuss the latest products and services available to us from our suppliers.

# Conference Schedule

This year we have a “Core Conference Schedule” with additional seminars. The core program is shown shaded in this summary.

Date/Time	Activity	Room
Wednesday April 6 <sup>th</sup>	VISSIM Course	Brighton
Thursday April 7 <sup>th</sup>	VISSIM Course	Brighton
5:00 - 7:00	Vendors Reception	TSA*
Fri April 8 <sup>th</sup> 7:30 - 8:45	Continental Breakfast	TSA
8:00 - 12:00	Registration	Lobby
8:45 - 10:15	1 Microsimulation Applications 2 ITS & Advanced Technologies 3 Safety through Design	Plaza A Plaza B Plaza C
10:15 - 10:30	Refreshment Break	TSA
10:30 - 12:00	4 Design Review: The Results 5 Road Safety for Vulnerable Road Users 6 Roundtable Discussion 1 - Roundabouts	Plaza A Plaza B Plaza C
12:00 - 1:30	Lunch and Keynote Speaker - Gordon Price	Regency
1:30 - 3:00	7 Measuring Road Safety 8 Designing Lines: Dealing with Issues Using Design 9 Transit: Keeping Pace	Plaza A Plaza B Plaza C
3:00 - 3:15	Refreshment Break	TSA
3:30 - 5:00	10 The Design Process for Other Users 11 Alternative Modes: Considering other Road Users 12 Roundtable Discussion 2 - Speed Management	Plaza A Plaza B Plaza C
5:30 - 11:00	Dinner and Entertainment: Dockside Restaurant and Improv at the New Revue Theatre: Granville Island	See Map Page 10
Sat April 9 <sup>th</sup> 7:30 - 8:45	Continental Breakfast	TSA
7:30 - 9:00	Registration	Lobby
8:45 - 10:15	13 Planning of Traffic & Movement 14 Capacity Management 15 Community Planning & Strategies	Plaza A Plaza B Plaza C
10:15 - 10:30	Refreshment Break	TSA
10:30 - 12:00	16 Vehicle Efficiency and Economics 17 There's More than Road Transport 18 Roundtable Discussion 3 - Public/Private Funding Partnerships	Plaza A Plaza B Plaza C
12:00 - 1:30	Conference Closing Session	Plaza
Sunday April 10 <sup>th</sup>	PTOE Refresher Course	Cypress

\* TSA - Trade Show Area

The VISSIM and PTOE courses require additional registration.

Please contact the Registration desk if you are interested in attending the PTOE seminar, if space is available.

# Thursday April 7<sup>th</sup>

**5:00 - 7:00pm**

**Registration - Lobby**

**Vendors Reception - Trade Show Area**

# Friday April 8<sup>th</sup>

**7:30 - 8:45**

**Continental Breakfast - Trade Show Area**

**8:00 - 12:00**

**Registration - Lobby**

**8:45 - 10:15**

## 1 Microsimulation Applications - Plaza A

- A Contingency Approach to Conducting Large Scale Micro-Simulation Modelling: *Mark Baker, Yannis Stogios and Ken Curry, Delcan Corporation*
- Large Corridor Microsimulation: *Karl Westby, HDR Engineering*
- VISSIM Micro-Simulation Modelling of One-Way to Two-Way Street Conversion in Downtown Vancouver: *Thomas Kwan, Hamilton Associates; Doug Louie, City of Vancouver and Hansel Wang, Translink*

## 2 ITS and Advanced Technologies - Plaza B

- Video over IP (VOIP) systems for Traffic Management: *Hicham F. Chatila, The Transpo Group*
- Using Archived ITS Data to Improve Regional Performance Measurement and Travel Demand Forecasting: *Robert Bertini, et al. Portland State University*
- Drive BC: *Homayoun Vahidi, IBI Group*

## 3 Safety through Design - Plaza C

- Road Safety Audits in the United States - Gaining Traction: *Sany R. Zein, Hamilton Associates*
- Sea to Sky Highway Design through Lions Bay using Context Sensitive Design: *Steve Brown, CH2M HILL*
- Pavement Marking Treatment for Speed Reduction at an Intersection on an Arterial Road: *Adrienne Mairs, City of North Vancouver*