

2016 Conference





## Welcome

The ROW Management Conference was created in 2015 to provide education and information that will raise awareness and promote the best rights-of-way for the public good and to give an opportunity for ROW owners and users to discuss common issues in a constructive, effective forum. The ROW Management Conference is important to people in the industry. The organizing committee looks forward to delivering many of these conferences in the future and is pleased to see this year's attendance has significantly grown over last year's inaugural conference.

We are looking forward to the 2017 ROW Management Conference. The theme will be "New Technologies in ROW Management to Better Service the Public."

Please don't forget to complete the survey before the end of today. There will be a draw prize for those participating.

The 2016 ROW Management Conference Organizing Committee would like to thank all delegates, presenters, sponsors, trade show participants and volunteers. You have all been very important in helping make the 2016 ROW Conference successful.

# Agenda

7 a.m. – 8 a.m.	Registration
	Lobby
7 a.m. – 8 a.m.	Exhibitor Displays Open
8 a.m. – 8:15 a.m.	Welcome & Opening Remarks
	Mayor Frank Scarpitti, City of Markham  LeParc 2
8:15 a.m. – 8:45 a.m.	Ontario One Call
	Ben Hamilton, Executive Director  LeParc 2
8:45 a.m. – 9 a.m.	ORCGA
	Ian Munro, President & CEO  LeParc 2
9 a.m. – 10 a.m.	Breakout Sessions
	To Utility Coordination Coop Ctudy O Workshop
	T2 Utility Coordination Case Study & Workshop Mark Cavanaugh, T2 Utility Engineers LeParc 1
	Mark Cavanaugh, T2 Utility Engineers
	Mark Cavanaugh, T2 Utility Engineers  LeParc 1  Permits Discussion Workshop  Nelson Costa, York Region
10 a.m. – 10:45 a.m.	Mark Cavanaugh, T2 Utility Engineers LeParc 1  Permits Discussion Workshop Nelson Costa, York Region LeParc 3  Street and Traffic Light LED Conversion Best Practices Michael Pringle, Honeywell
10 a.m. – 10:45 a.m. 10:45 a.m. – 12 p.m.	Mark Cavanaugh, T2 Utility Engineers LeParc 1  Permits Discussion Workshop Nelson Costa, York Region LeParc 3  Street and Traffic Light LED Conversion Best Practices Michael Pringle, Honeywell LeParc 4

10:45 a.m. – 12 p.m.	Seminars (continued)
	Cross Bore Tanya Stephens, TDS Consulting Tyler Boyes, Union Gas LeParc 3
	<b>Lighting Standards</b> Bill Smelser, Laurilliam Lighting Technologies Inc. <b>LeParc 4</b>
12 p.m. – 1 p.m.	Lunch & Entertainment
	Robert Muir, City of Markham Nancy Letman, City of Markham <b>LeParc 2</b>
1 p.m. – 2 p.m.	Seminars
	Locate Discussion Tracey Teed-Martin, Enbridge Eric Boere, Region of Halton LeParc 1
	Construction, Restoration within the Public Right of Way Prem Hall, City of Markham LeParc 3
	LED Street Light Conversion – an Upper Tier Perspective Doug MacKay, York Region LeParc 4
2 p.m. – 2:30 p.m.	Networking Break
2:30 p.m. – 3:30 p.m.	Seminars
	Small Cell Technology Lew Sears, CommSiteWorks Inc. Kevin Hickey, CommSiteWorks Inc. LeParc 1
	MAA/MC Permit Workshop Linda Carkner, City of Ottawa LeParc 3
	TransCanada Presentation Mitch Gregoire, TransCanada LeParc 4

## **Session Summaries**

#### Ontario One Call

#### Ben Hamilton, Executive Director

8:15 a.m. - 8:45 a.m.

LeParc 2

Ben Hamilton, Ontario One Call's Executive Director, will update attendees on upcoming improvements to the ON1Call operating platform, as well as new reporting tools to help members gain visibility into their locate delivery performance.

#### **ORCGA**

#### Ian Munro, President & CEO

8:15 a.m. - 8:45 a.m.

LeParc 2

Ian is here to share with us the 5 W's and how damage prevention is being enhanced in Ontario and across Canada, with some of the results so far.

The ORCGA and its valuable sponsors and members representing 19 different stakeholders (many of them here today) have a vision of "Leading Ontario to be the Safest Jurisdiction with the Most Reliable Infrastructure in North America" and with a mission "To Enhance Public Safety and Utility Infrastructure Reliability through a Unified Approach to Effective and Efficient Damage Prevention"

Damage Prevention is a shared responsibility and without our many dedicated volunteers and staff over the years we would not be where we are today!

#### T2 Utility Coordination Case Study & Workshop

#### Mark Cavanaugh, T2 Utility Engineers

9 a.m. – 10 a.m.

LeParc 1

Poor planning from a utility perspective at the onset of a project can often come back from the grave to exact revenge! The role of a dedicated Utility Coordinator is more important than ever in today's civil engineering market as a result of congested right-of-ways, complicated utility infrastructure, short design periods, and the list goes on.

Let T2ue's Utility Coordination Team walk you through a typical road widening project, and discuss how to apply the TAC "Guidelines for Coordination of Utility Relocations" to ensure successful execution from the Project Owner's and the Utility company's perspective alike. Within this session the audience will have the opportunity to assess and address a complex utility conflict scenario by applying the TAC guidelines and proven utility conflict solving processes. We will help you avoid making mistakes in the early stages of your project so "What Lies Beneath" does not come back to harm you in the future.

#### **Permits Discussion Workshop**

#### **Nelson Costa, York Region**

9 a.m. - 10 a.m.

LeParc 3

The "Corridor Management" presentation explains how the Regional Municipality of York administers road permits; including applications requirements, general conditions and challenges. Learn about new tools and monitoring efforts coming soon.

#### Street and Traffic Light LED Conversion Best Practices

#### Michael Pringle, Honeywell

9 a.m. - 10 a.m.

LeParc 4

Conversion of LED traffic signals and street lighting, both decorative and cobra head type, is a complex implementation today. Starting with financing options, including energy performance contracts or other funding from savings options, Honeywell will present their best practices. Numerous design factors come into play, such as the culture of the municipality, the investment payback hurdles, heritage area requirements, selection of street light type to maximize grants and street lighting control capabilities. Once design is complete, a good vetting process is required to select best of class approved suppliers, an effective and proactive project management put in place to avoid risks and comply with IES guidelines.

#### **CRTC Panel Discussion**

Janis Ingram, York Region Mike Piaskoski, Rogers Cable Gord McGuire, City of Hamilton Philippe Gauvin, Bell Canada

10:45 a.m. - 12 p.m.

LeParc 1

This session will give a brief history of past MAA related CRTC decisions. Come listen and learn from an expert panel consisting of municipal and telecommunication representatives as they discuss several issues that have developed since the release of the 2001 Ledcor decision leading up to the recent Hamilton/Bell decision. Panelists will discuss their perspectives on MAAs and the CRTC decisions including whether an MAA is actually necessary to govern the activities of the carriers in municipal streets.

#### **Cross Bore**

Tanya Stephens, TDS Consulting Tyler Boyes, Union Gas

10:45 a.m. - 12 p.m.

LeParc 3

### Union Gas Utility Cross Bore Safety Program – Managing the Risk of Trenchless Installation

Utility Cross Bores cost all infrastructure owners time and money. And natural gas lines intersecting sewer lines can also present a serious safety risk. This session will give a brief overview of the cross bore issue from a gas utility's perspective and then show how Union Gas works to manage that risk through stakeholder awareness and education, legacy infrastructure inspection and revised construction processes and procedures.

### The City of Markham case study – A Municipal point of view and challenges to identify and rectify cross bores.

CCTV is commonly used to provide condition assessments on the interior of sewer pipes. The City of Markham's CCTV program results in defect coding and condition grading of sewer pipes. Several decisions within a municipality and across departments are made based on this data including;

- operational rehabilitation, work orders and budgets
- asset management asset criticality, prioritization and risk assessments
- sewer rehabilitation/replacement and capital planning.

CCTV reports identified potential cross bores that has become a top priority in mitigating risk to the public and environment. Day-to-day sewer maintenance activities has the potential to puncture or break cross bores resulting in natural gas leaks throughout the sewer system and back into homes. The asset management department has found traditional sewer management challenging with the identification of cross bores.

#### **Lighting Standards**

#### Bill Smelser, Laurilliam Lighting Technologies Inc.

10:45 a.m. - 12 p.m.

LeParc 4

This presentation will discuss the latest ANSI/IES street lighting standards and their application to Municipal Standards focusing particularly on the use of LED street lighting luminaires. It is intended to help standards writers understand the differences between the use of older light sources and the more complex LED sources. Topics include, specification design criteria and considerations, the science of LED light sources, design concepts and luminaires selection. An extensive review of design concepts from the latest edition of ANSI/IES RP-8-14 will be discussed along with other IES technical publications.

#### **Locate Discussion**

### Tracey Teed-Martin, Enbridge Eric Boere, Region of Halton

1 p.m. – 2 p.m.

LeParc 1

#### Project Locates: It's Broken, Let's Fix It

This joint session on utility locates examines industry-wide challenges with a focus on municipal and natural gas pipeline experiences.

Halton Region will provide an overview of the costs and benefits of Bill 8, the Ontario Underground Infrastructure Notification System Act to their municipality. The presentation will propose opportunities for inter-municipal consistency, discuss unassumed subdivision projects, and consider Municipal Act roles and jurisdiction for the Right-Of-Way. A compelling case will be made to reconsider project locates delivery models industry-wide, and suggest initial criteria to evaluate alternative approaches.

Enbridge will present an alternative locate delivery model, this model will offer a market solution to minimizing the inputs of locates to the utility members. It is a

model that will be piloted in the City of Toronto during the 2017 construction season for those infrastructure owners who wish to participate. The model involves infrastructure owners taking accountability for locates associated with their own capital projects.

\*Opinions presented are independent, as the Halton Region does not share a service area with Enbridge.

#### Construction, Restoration within the Public Right of Way

#### Prem Hall, City of Markham

1 p.m. – 2 p.m.

LeParc 3

Best practices and City standards as it relates to 3rd party utility works within the City of Markham's right of way.

Will discuss current site restoration standards; (temporary and permanent conditions). Site safety for both pedestrians and vehicles as it relates to current provincial and municipal requirements.

- Site safety: Speak to the Ontario Highway Traffic Act and Book 7. Additionally highlight the need for on-site safety and notification on un-attended active construction sites.
- Temporary site restoration: Restoration on hard (roads) and soft (boulevards) surfaces. Temporary conditions are dictated by weather conditions/ seasons, and other special conditions or situations.
- Full/ permanent site restoration: Will address the City standards and best practices for permanent site restoration, timelines, warranties, etc.
- Discuss the issues with restoration within un-assumed areas.
- Q&A

#### LED Street Light Conversion - an Upper Tier Perspective

#### Doug MacKay, York Region

1 p.m. – 2 p.m.

LeParc 4

Local municipalities have been proceeding with the conversion of HPS street lights to LED, as there are great benefits to the mostly over-lit residential roadways. At major arterial intersections, the benefits of the LED technology are not as clear-cut, as there are number concerns, most notably is whether LED can provide the same level of illumination as HPS. This presentation will explore the challenges facing the upper tier municipality.

#### **Small Cell Technology**

#### Lew Sears, CommSiteWorks Inc. Kevin Hickey, CommSiteWorks Inc.

2:30 p.m. - 3:30 p.m.

LeParc 1

What is Small Cell Technology? Why is telecommunications moving in this direction? What are the challenges of implementing Small Cell technology? How will it change my work day?

If you are interested in learning the answer to these questions and more about this new technology in telecommunications, plan on attending this session. You won't be disappointed as this technology is coming to Ontario.

#### **MAA/MC Permit Workshop**

#### Linda Carkner, City of Ottawa

2:30 p.m. - 3:30 p.m.

LeParc 3

Come together in this workshop with others in your fields to discuss what everyone has in place for Agreements, Inspections, Utility Coordination Committees and Municipal Consent Permits. An opportunity to hear what others are doing and perhaps share or pick up a thing or two.

#### TransCanada Presentation

#### Mitch Gregoire, TransCanada

2:30 p.m. - 3:30 p.m.

LeParc 4

#### Partnering with TransCanada while working on the Right-of-Way

This presentation will include an overview of TransCanada's pipelines and facilities in Ontario and information on how municipalities can work safely and efficiently with underground utilities. Topics include the Ontario One Call system, locates, working on the right-of-way, pipeline crossings, changes to regulations, operations and maintenance activities, public awareness and safety information.

## Speaker Bios



#### **Mayor Frank Scarpitti**

Mayor Frank Scarpitti was elected as Mayor of Markham in 2006 and 2010 and in 2014.

He was first elected to Markham Council in 1985 as a Regional Councillor. In total, the people of Markham have voted for Mayor Scarpitti eight times over 29 years.

Mayor Scarpitti also serves on York Region Council, is the current Chair of York Region Rapid Transit Corporation (VIVA Transit), a member of the Region's Finance and Administration Committee and is the Chair of York Region Police Services Board.

He is Vice Chair of PowerStream, the second largest municipally-owned electricity distribution company in Ontario.

Mayor Scarpitti gives time to a number of non-profit associations related to health, culture and quality of life programming. As Co-Chair of the Markham Stouffville Hospital's Capital Campaign his efforts contributed to surpassing the \$50 million goal.

He led Markham's initiative to secure the Markham Pan Am Centre and the new campus for York University.

He is a strong advocate of internet voting in the municipal elections that started in 2003 that has been used in all subsequent elections.

Mayor Scarpitti and his wife Nancy have three children.

#### **Debbie Korolnek**

Debbie Korolnek is currently the General Manager, Engineering, Planning and Environment, for Simcoe County. She graduated from the University of Guelph in 1983 with a B.Sc. in Water Resources Engineering and has worked in municipal engineering for private industry and the municipal sector for over 30 years. She is a past president of Ontario Public Works Association, a chapter of American Public Works Association.

Debbie began her career in consulting engineering working in municipal water and wastewater. In 1991 she joined the Regional Municipality of York as a project engineer, and worked in several positions to eventually become the General Manager, Water and Wastewater in 2005. She left York Region in 2008 to pursue a broader career in Public Works with the Town of Bradford West Gwillimbury. Debbie joined Simcoe County in April 2013. She has oversight of the Planning, Solid Waste, Roads, Forestry, Economic Development, Tourism and By-Law Departments.

#### **Ben Hamilton**

Ben Hamilton was appointed Executive Director of Ontario One Call in 2014. In this role, Ben is responsible for leading a rapidly expanding team in the delivery of Canada's first mandatory "Call Before You Dig" system.

Prior to joining Ontario One Call, Ben worked for ten years in the utility industry in various government relations, strategic planning and damage prevention roles. He has also served in senior positions in both federal and provincial governments, most recently as a Director at Transport Canada.

He holds a B.A. (Honours) and Masters in Public Administration from Queen's University.

#### Ian Munro

#### President & CEO, Ontario Regional Common Ground Alliance ORCGA

Ian has several years of experience in the Damage Prevention Industry as a Registered Safety Professional and volunteer with ORCGA since 2003.

He has been working on major infrastructure projects and many other work sites throughout Ontario.

Before that he was an Electrical Utility Distribution Supervisor in Toronto for several years and originally started his career as a Road Builder Foreman in Alberta.

Ian graduated in Civil Engineering Technology and then went back to night school to graduate in Electrical Engineering Technology and then in Ontario Business Management Development.

Volunteering has been a part of Ian's growth over the years including; giving back to his Community as a Sports Coach and as a Level 5 Canadian Hockey Referee after an active career in Collegiate sports.

#### Mark Cavanaugh

In his current role of Sr. Utility Coordinator, is responsible for managing utility coordination assignments for clients across Ontario. Mark has provided coordination, design and utility protection services on several large profile projects including 407 ETR preliminary design, TTC Union Station Second Station Expansion, Metrolinx Strachan Grade Separation Project and Eglinton Crosstown LRT project. Mark's strong relationships with key Utility personnel are very valuable when working on projects.

#### Michael Piaskoski

Michael Piaskoski, a lawyer and an engineer, holds the title of Director – Municipal & Industry Relations at Rogers Communications. Michael is responsible for managing the commercial relationships between Rogers and the municipalities, governmental authorities, hydro companies and telecom carriers where Rogers requires access to build its network, whether wireline or wireless. He has successfully negotiated numerous access agreements with municipalities and infrastructure owners across Canada, allowing Rogers to deploy and upgrade its national plant.

Michael joined Rogers in 2007. Prior to that, he spent 12 years in private legal practice at two of Canada's largest law firms. His practice focused on the telecommunications industry, during which he served a broad range of clients, including the telephone companies, their competitors, wireless and satellite companies, cable companies and broadcasters. His legal expertise includes competition law, telecommunications and broadcasting regulatory law and commercial law.

#### Gord McGuire BSc., O.L.S.

Gord is a licensed Ontario Land Surveyor and holds a B.Sc. in Survey Science from the University of Toronto. Gord has worked in the energy sector in Western Canada, the development sector in the GTA and at the City of Hamilton, most recently as the Manager of Geomatics and Corridor Management within Public Works. Gord's roles include the responsibility for utility permitting, and regulatory access rights on City Rights of Way. Recently, Gord led a team of professionals through a CRTC application to develop a next generation Municipal Access Agreement reflecting a modernized approach to access rights, costs and responsibilities. Gord has also led street light rate setting interventions at the Ontario Energy Board that developed a more consistent approach to applying energy costs to street lighting systems.

With Gord's background in land law and mathematics has been able to apply these skills to regulatory processes favourably for the municipal sector.

#### **Nelson Costa**

Nelson Costa, is the Manager of Corridor Control and Safety for The Regional Municipality of York. He has more than 16 years of public sector experience focusing on traffic engineering, road safety and right-of-way management. He is responsible for the development of public policies and administration of traffic data and bylaws. Nelson works with various stakeholders; including enforcement agencies, public health and elected officials on engineering improvements and safety initiatives. He sits on a number of committees providing guidance and direction on traffic engineering matters, including Transportation Association of Canada's Road Safety Standing Committee.

#### Michael Pringle, P.Eng

In his role as Senior Business Consultant with Honeywell Energy Solutions Group, Michael works with municipal clients across the country to develop and implement street-lighting, facility and renewal self-funded. Michael coordinates teams of Honeywell operations personnel, partner engineering and contracting firms, dedicated project managers, engineers and coordinators, as well as field technicians. Then, using his background in electrical engineering, business optimization, IT applications, asset condition assessment and energy engineering, Michael provides unique and value-added retrofit solutions tailored to the individual needs and culture of his municipal clients.

#### Janis Ingram,

#### Senior Counsel with The Regional Municipality of York:

Janis has been practising inhouse with the Regional Municipality of York since 2002. In her Senior Counsel position, Janis provides legal advice to the Regional Corporation on infrastructure projects, corporate governance and risk management. Her portfolio includes projects such as the Toronto-York Spadina Subway Extension and the York Telecom Network. Janis also manages the Region's contracts with third parties that wish to access Regional lands and facilities to install their infrastructure. From 2009 to 2014, Janis was assigned to York Region's subsidiary, York Region Rapid Transit Corporation, as their inhouse legal counsel and corporate secretary to the Board. During this time, Janis negotiated the master business relationship with Metrolinx regarding York's bus rapid transit system and provided key legal advice regarding the implementation and delivery of various rapid transit projects.

#### **Philippe Gauvin**

#### Senior Counsel, Regulatory Law and Policy

Phil joined BCE's regulatory team upon completion of his Masters in law and technology at the University of Ottawa in 2007. He is the company's director of tariffs and is supported by BCE's Tariffs Group which is responsible for all tariff filings submitted to the CRTC on behalf of Bell Canada, Bell Aliant, Cablevision du Nord, Dryden Municipal Telephone Service, Kenora Municipal Telephone Service, NorthernTel, Ontera and Télébec. As part of his practice, he deals with a wide breadth of telecommunications issues, leading, on the Company's behalf, files such as the CRTC's recent review of basic telecommunications services in Canada and the CRTC's ongoing review of Next Generation 911 networks. He also deals with various municipal rights-of-way and support structure access issues and acted as Chair of the CRTC Interconnection Steering Committee's (CISC) Municipal Access Agreement Working Group during the creation of the CRTC's model municipal access agreement, lead the company's participation in the Hamilton CRTC proceeding and was responsible for the company's participation in support of Rogers' recent Supreme Court challenge of the Chateauguay decision.

#### **Tayna Stephens**

Tanya is a GIS and database specialist with considerable experience in municipal asset management. She well versed in the development of infrastructure inspection programs, asset sustainability financing plans, development and implementation of targeted capital plans for water, wastewater and transportation assets and deployment of a corporate asset management program and GIS strategy.

She is a NASSCO certified trainer for the coding, assessment and condition classification of sewers. This certification enables her to certify others in PACP, MACP and LACP.

Tanya also has experience in public education programs aimed at extraneous flow reduction and water conservation. She has developed CCTV data driven performance models for the effective measurement and reporting of severity, extent and distribution of wastewater collection system defects.

#### **Tyler Boyes**

Tyler Boyes joined Union Gas in 2007 as a Project Manager in the Operations Project Support group where he worked on a number of large and complex projects such as the Union Gas GIS Replacement Program and the Fleet Telematics Implementation Project. Tyler moved to the Plant Damage Prevention Team and assumed the Program Coordinator role for the Cross Bore Safety Program in December of 2013.

Before joining Union Gas, Tyler was a Project Manager for a technology company where he led multi-disciplined teams in large-scale IT development and implementation projects offering supply chain, logistics and workflow management solutions to the automotive sector. He lives in London Ontario and is a graduate of the University of Western Ontario.

#### William A. Smelser

William graduated from the University of Montreal with a BSc degree majoring in Mathematics and Physics with a minor in Business Administration.

He started his lighting career with Westinghouse Lighting in July 1963 working in the electrical and quality assurance labs. Since then, he has filled positions in Manufacturing, Engineering, Sales and Marketing with various streetlighting manufacturers. He is the President and CEO of Laurilliam Lighting Technologies Inc.

William became a member of the Illuminating Engineering Society of North America (IESNA) in 1983 and a member of Canadian Standards Association in 1988.

He contributes to several committees including: Technical Committees: Lighting Equipment (TC419), Energy Efficiency of HID Ballasts (C863), Performance of High Mast Luminaires (C811) and Performance Standard for Roadway Lighting Luminaires (C653). He is currently helping develop updates of C653 and C811 to include evaluation of Metal Halide, Induction and LED Roadway luminaires and chairs the sub-committee developing a methodology for evaluating energy savings from the use of adaptive controls in street lighting applications.

#### **Eric Boere**

Eric Boere is Halton Region's Manager of Water Distribution. Halton Region is an upper tier government providing services to residents in the City of Burlington, the Town of Halton Hills, the Town of Milton and the Town of Oakville. Eric has over 20 years of experience in the construction, operations and management of municipal water and sewer utilities. Thirteen of those years have been at Halton Region, with six years as the Director of Environmental Services for the Municipality of Thames Centre (east of London). He is currently a municipal representative member of the Ontario One Call Operations Committee.

#### **Prem Hall**

Prem Hall's career started with the City of Toronto in the Planning and Mapping department in 1991.

From 1993, he worked for various communications companies in the GTA as a project manager, for both outside plant and inside plant fiber optic installation/construction.

Prem started a consulting company in 1998 in the project management field of telecommunications, specifically network planning and project management.

In 2003, he began working at (then the Town of Markham) as Utility inspector for 3rd party utility installations.

In 2015, Prem moved over to the City of Markham Engineering Department as a municipal inspector responsible for subdivision lot in-fills and site plan inspections.

#### **Doug MacKay**

Doug MacKay graduated from Queen's University in 1992 in civil engineering. He also has a Masters of Public Administration from the University of Western Ontario. Doug has been with York Region since March 2015. Prior to that he was with the Region of Durham for 13 years. His early professional career was spent in the private sector. With close to 25 years in the industry, he has a wide range of experience and is currently the Manager of Engineering in Capital Planning and Delivery of the Transportation Services Department. His responsibilities include the management lead on major capital transportation projects, and leading the electrical design group, which is responsibility for designing and constructing traffic control signals, flashers and street lights.

#### **Lew Sears**

Lew Sears heads the Policy, Best Practices & Federal/Municipal approvals activities of the firm. Working with Government his ambition is to assist Municipalities in Best Practice Areas:

- 1. Advise Governement to identify, evaluate and prioritize revenue opportunities in the telecom sector utilizing Municipal infrastructure, surplus lands and facilities.
- 2. Assist Governement to develop Telecom Policy enabling private/public broadband expansion utilizing Municipal infrastructures. Land, R.O.W.s, Poles, Towers, Water storage tanks & Buildings and fine tune the Policy to promote community support, reduce municipal operational complexities and comply with ISED "Ind. Canada" & Health Canada requirements.
- 3. Assisting Government to leverage existing out side plant and Telecom policy with the Carriers to advance broadband strategic goals within the municipality and especially rural areas.
- 4. Assist Governement in planning, design and rollout of wireless and fibre network infrastructure

Having been in several key senior management positions in the telecom industry for many years, Lew works for the major telecom carriers on expanding their cellular and fibre networks.

#### **Kevin Hickey**

With 36 years of communications network experience, Dr. Hickey has significant experience in both wireline and wireless network engineering. He is a subject matter expert in RF Networking and Fibre and is a technical and business advisor to the hydroelectric utility, internet service provider, and telecommunications industries. Dr. Hickey specializes in combining strategic and tactical perspectives on business, operational, and technology opportunities into innovative and cost-effective solutions to improve overall company performance and help customers deal with the rapidly shifting technology landscape. He has demonstrated highly effective leadership in start-up, transformation, and turn-around situations in Canada, Europe and USA.

#### **Linda Carkner**

Linda is a Professional Engineer with over 30 years of experience in the Municipal sector. She began her career in the City of Windsor. After 15 years in Windsor, with both the Windsor Utilities Commission and the City of Windsor, a family move to Ottawa gave Linda new opportunities. She spent time with ENCON dealing with risk management for construction projects across the country, before returning to her municipal roots with the City of Ottawa. Linda has been with the City since 2002 in the role of Program Manager of Right of Way Information and Approvals. Linda Chairs the Utility Coordinating Committee in Ottawa, has been active with the Federation of Canadian Municipalities and sits on the Board of Directors for the Ontario Regional Common Ground Alliance.

#### Mitch Gregoire

Michel (Mitch) Grégoire has held the position of Director, Eastern Region for TransCanada in Bolton, Ontario since 2013. Mitch began his career with TransCanada in 2008 as an area manager in Northern Alberta, and has also worked in the Forest products Manufacturing industry in various leadership roles for over 20 years. Throughout his career Mitch has made safety his top priority and is a current member of the ORCGA Board of Directors. Mitch is originally from Winnipeg, Manitoba and graduated from the University of Manitoba with a degree in Mechanical Engineering in 1987.

