

The Regional Municipality of Durham COUNCIL INFORMATION PACKAGE September 22, 2017

Information Reports

2017-INFO-95 Commissioner and Medical Officer of Health – re: Program Reports

Early Release Reports

There are no Early Release Reports

Staff Correspondence

1. Memorandum from Dr. R. Kyle, Commissioner and Medical Officer of Health – re: Review of the Ontario Ambulance Communications Delivery Model

Durham Municipalities Correspondence

There are no Durham Municipalities Correspondence

Other Municipalities Correspondence/Resolutions

There are no Other Municipalities Correspondence/Resolutions

Miscellaneous Correspondence

- Canada Boarder Services Agency re: Advising of the closing of the CBSA Outports and Postal Operations Office that was located at the Oshawa Airport – this closes as of September 29th
- 2. Metrolinx re: Metrolinx Board Meeting September 2017
- 3. Metrolinx re: The Link Board Meeting Recap
- 4. Great Lakes Fund (MOECC) re: Apply for a grant to protect the Great Lakes by November 10, 2017

Advisory Committee Minutes

- 1. Durham Trail Coordinating Committee (DTCC) minutes September 7, 2017
- 2. Durham Environmental Advisory Committee (DEAC) minutes September 14, 2017
- 3. Durham Nuclear Health Committee (DHNC) Minutes September 15, 2017

Action Items from Council (For Information Only)

Action Items from Committee of the Whole and Regional Council meetings

Members of Council – Please advise the Regional Clerk at <u>clerks@durham.ca</u> by 9:00 AM on the Monday one week prior to the next regular Committee of the Whole meeting, if you wish to add an item from this CIP to the Committee of the Whole agenda.

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3111



The Regional Municipality of Durham Information Report

From:	Commissioner & Medical Officer of Health
Report:	#2017-INFO-95
Date:	Sept 22, 2017

Subject:

Program Reports

Recommendation:

Receive for information

Report:

- 1. The Chronic Diseases & Injuries Programs, Environmental Health & Emergency Preparedness Programs, Family Health Programs, Infectious Diseases Programs, Paramedic Services and Professional & Administrative Services Reports for June-August 2017 are attached to this report.
- 2. Key highlights include:
- Chronic Diseases & Injuries Chronic Disease Prevention and Prevention of Injury and Substance Misuse Updates
- Environmental Health & Emergency Preparedness Food Safety, Ontario Building Code, Part 8, Public Health Emergency Preparedness and Safe Water Updates
- Family Health Infant and Child Development and Reproductive and Child Health Updates
- Infectious Diseases Infectious Diseases Prevention and Control, Rabies Prevention and Control, Sexual Health and Vaccine Preventable Diseases Updates
- Paramedic Services Administration, Operations, Quality Development and Logistic Updates
- Professional & Administrative Services Epidemiology and Evaluation Information Products and Ethics Updates

3. Boards of health are required to "superintend, provide or ensure the provision of the health programs and services required by the [Health Protection and Promotion] Act and the regulations to the persons who reside in the health unit served by the board" (section 4, clause a, HPPA). In addition, medical officers of health are required to "[report] directly to the board of health on issues relating to public health concerns and to public health programs and services under this or any other Act" (sub-section 67.(1), HPPA). Accordingly, the Health Information Update is a component of the Health Department's 'Accountability Framework', which also may include program and other reports, Health Plans, Quality Enhancement Plans, Durham Health Check-Ups, Performance Reports, business plans and budgets; provincial performance indicators and targets, monitoring, compliance audits and assessments; RDPS certification; and accreditation by Accreditation Canada.

Respectfully submitted,

Original signed by

R.J. Kyle, BSc, MD, MHSc, CCFP, FRCPC, FACPM Commissioner & Medical Officer of Health

ABBREVIATIONS

- ACP Advanced Care Paramedic
- ASD Autism Spectrum Disorder
- AWQI Adverse Water Quality Incident
- CCHS Canadian Community Health Study
- COPD Chronic Obstructive Pulmonary Disease
- DRHD Durham Region Health Department
- ECA Electronic Cigarettes Act, 2015
- ED Emergency Department
- EH Environmental Health Division
- HDEMP Health Department Emergency Master Plan
- HMCA Healthy Menu Choices Act, 2015
- HIV Human Immunodeficiency Virus
- HOC Health Operations Centre
- HPPA Health Protection and Promotion Act
- HPV Human Papillomavirus
- HUS Haemolytic Uremic Syndrome
- ICD Infant and Child Development
- IFSS Infant Feeding Surveillance System
- IMS Incident Management System
- IPAC Infection Prevention and Control
- KI Potassium lodide
- LD Lyme Disease
- MOHLTC Ontario Ministry of Health and Long-Term Care
- NAS Neonatal Abstinence Syndrome
- NSAW National Sun Awareness Week
- OBC Ontario Building Code
- OPG Ontario Power Generation
- OPHS Ontario Public Health Standards
- OSDUHS Ontario Student Drug Use and Health Survey
- PHI Public Health Inspector
- PHN Public Health Nurse
- PHNN Public Health Nursing and Nutrition Division
- PHO Public Health Ontario
- PHOL Public Health Ontario Laboratory
- PHU Public Health Unit
- PrEP Pre-Exposure Prophylaxis
- PSS Personal Services Settings
- RDPS Region of Durham Paramedic Services
- RRFSS Rapid Risk Factor Surveillance System
- SFOA Smoke-Free Ontario Act
- SFO SAC Smoke-Free Ontario Scientific Advisory Committee
- TEO Tobacco Enforcement Officer

- UV Ultraviolet
- VBD Vector-Borne Diseases
- WNTD World No Tobacco Day
 WNV West Nile Virus



CHRONIC DISEASES AND INJURIES PROGRAMS

REPORT FOR JUNE - AUGUST 2017

CHRONIC DISEASE PREVENTION

Exposure to Ultraviolet Radiation (Sun Safety)

UV rays from the sun and indoor tanning devices are carcinogenic (WHO, 2017). Over exposure to UV rays from the sun or from tanning beds can lead to sun burn, premature skin aging, wrinkles, retinal burns, cataracts, eye lesions and skin cancer. It only takes a few serious sunburns in childhood to increase the risk of developing skin cancer later in life. According to DRHD's Cancer at a Glance report, melanoma incidence is significantly higher in Durham Region than Ontario for both male and female populations.

The Canadian Dermatology Association has promoted NSAW annually since 1989 as a strategy to educate Canadians about the harmful effects of the sun. DRHD promoted NSAW June 5-11. A total of **148** schools (elementary and secondary) and **22** workplaces including health care providers and community agencies participated in the campaign. The campaign included:

- a media release to local media outlets on June 2 promoting NSAW resulting in 1 radio interview with Durham Radio
- an advertisement promoting NSAW on the Weather Network mobile app for 3 weeks
- a social media post on Durham Healthy Families (Facebook, Twitter, Instagram with **325** likes) reminding parents of young children to protect their children from the risk of overexposure to sun's UV radiation
- advertisement included in the Whitby, Clarington, Oshawa Metroland Leisure Service Guides
- a mail out of NSAW information to **674** community partners (**153** child care centres , **521** health care providers and others).

Healthy Eating (Schools)

Eating more vegetables and fruit is an important part of staying healthy. Packing vegetables and fruit in a child's lunch and snack helps to reach the recommended amount of vegetables and fruit each day (Canada's Food Guide, 2011). A healthy diet rich in a variety of vegetables and fruit helps reduce the risk of certain cancers, lowers the risk for heart disease, and helps students grow, develop and succeed in school (Government of Canada, 2017). In Durham Region, only **38%** of the residents aged 12 and over eat vegetables and fruit five or more times per day (CCHS, 2014).

A recommended public health strategy amongst school-age children includes raising awareness with parents about the importance of incorporating more vegetables and fruits in their lunches and snacks (NRC, 2016). Evidence shows that using different social media platforms to promote health messaging is an effective health communication tool (Social Media Toolkit, 2014). Almost half of Durham Region residents use social media such as Facebook, Twitter, YouTube, Pinterest or blogs. In 2015, internet use among those aged 45 and younger was over **98%**, with females (90%) more often using the internet to access health information than males (78%) (RRFSS, 2015). Currently, the DRHD has Durham Healthy Families Facebook, Twitter, Instagram and YouTube accounts that target parents with children 0-18. These venues are utilized to promote messaging related to packing healthy school lunches and snacks.

A social media vlog on the topic of *Packing some Wow* in your child's lunch was posted in mid-August, resulting in **9,186** (7676 Facebook, 1510 YouTube) video views.

Content of the video focused on:

- Describing a healthy lunch and snack
- Incorporating vegetables and fruit in a healthy snack and lunch
- Encouraging children to help prepare and pack their own lunches and snacks
- Practicing opening lunch containers with the children
- Keeping hot foods hot and cold foods cold.

Posts on the Durham Healthy Families Facebook, Twitter and Instagram accounts also accompanied this vlog to further reach the target audience, resulting in the following engagements:

- Facebook (likes, comments, shares, post clicks) 443
- Twitter (likes, retweets, comments) 2
- Instagram (likes) 120

Overall, there were **9,751** engagements, which identifies the number of residents who engaged with the content of *Packing some Wow* in your child's lunch.

Healthy Weights

In the last 30 years, obesity rates have doubled in adults and tripled in children, with current statistics showing that **1 in 3** children and youth in Canada are overweight or obese. Obesity in childhood is likely to persist into adult years, with teenagers who are obese having an **80%** chance of remaining obese as adults. If nothing changes, this will be the first generation of kids who will not live as long as their parents.

With excessive weight gain, children are at higher risk of developing a range of health problems in childhood and in their later years, including:

- high blood pressure, stroke and heart disease
- Type-2 diabetes
- bone and joint problems
- certain types of cancer
- psychosocial challenges (e.g., negative body/self-image, stigmatization, depression and impaired quality of life).

Evidence shows that unhealthy eating, physical inactivity and inadequate sleep are modifiable risk factors that are causally associated with childhood and youth overweight and obesity (Healthy Kids Panel, 2013). As a result, PHNs continue to pursue opportunities to provide education and build capacity with families to promote healthy routines. While multiple tools on the topic of physical activity and healthy eating exist, there is a need for a tool to promote healthy sleep routines. As such, a new interactive sleep activity and easy to read one-page summary of key messages for healthy routines was developed to support the current *Creating Healthy Routines for You and Your Family* resource.

Healthy routines messaging was provided at the following community and school events:

Community:

- How-to in Ten Library events (2 in priority neighbourhoods): attended 5 events, reaching approximately 500-600 participants
- Parents Supporting Parents (priority neighbourhood): This is a social group providing families the opportunity to support each other through the joys and challenges of family life. PHNs participated in a back to school event with 150 participants attending
- Carea Community Barbeque (priority neighbourhood): Carea Community Health Centre and several community partners hosted a BBQ servicing the Glen Street neighbourhood, in which approximately **110** families were engaged through the interactive sleep activity
- Rose of Durham (priority neighborhood): Rose of Durham services young parents and their children. An interactive display promoting healthy routines was provided at an event where approximately **200-300** families visited

- Stepping Stones/Ontario Early Years Centre (priority neighborhood): Stepping Stones is a program for families with a child entering kindergarten. PHNs provided 12 healthy routines presentations at 4 different sites in Ajax. Attendance for each session averaged between 12-15 parents
- Welcome Centre Ajax and Pickering (priority populations): Approximately **101** participants attended various health education sessions on creating healthy routines facilitated by PHNs at both sites
- Child Care Forum: **51** front line staff and supervisors of child care centers attended a workshop provided by PHNs to learn about strategies to help families implement healthy routines at home.
- Girl Guides: An interactive healthy routines workshop was provided for **8** leaders and approximately **58** guides, brownies and sparks aged 6-12
- Social Media: Social media posts were developed for Facebook, Twitter and Instagram for the Durham Healthy Families social media platform, with the topic focusing on small steps towards health and included epidemiology data. Facebook received a total of 87 likes, 9 comments, 19 shares and 87 post clicks. Twitter total engagement was 35. Instagram total engagement was 138 with a 30% results rate.

Schools:

- Healthy weights' messaging was provided to many schools crossing all **6** school boards that included parent and educator presentations, workshops, parent engagement events, parent coffee chats, messaging promoted within welcome to kindergarten events and supports
- Schools Cool (priority neighbourhoods): Schools Cool is a school readiness program based out of 5 schools, located within 4 of the priority neighborhoods. Throughout the program, 51 parents were reached with information on creating healthy routines
- Summer Rays (priority neighbourhood): In partnership with the Durham Catholic District School Board, PHNs supported this program which was offered in **3** priority neighborhoods in **3** municipalities in Durham Region. Over **61** families were reached with health information on the topic of creating healthy routines.
- Welcome Information Session for Newcomers (priority neighborhood): In partnership with the school boards and the Community Development Council of Durham, the Settlement Workers in Schools provide an orientation program for newcomer students and families. Healthy routines messages were provided to approximately 80 families through a presentation and display.

Promoting Physical Activity in Schools

Many children lack the fundamental movement skills, knowledge, and physical activity behaviours needed to lead healthy active lifestyles as evidenced by the startling rates of physical inactivity, obesity and decreased fitness. In the 2016 ParticipACTION Report Card physical activity levels of Canadian children and youth were given an overall grade

of D minus for the fourth year in a row because most children and youth in Canada are not meeting Canadian Physical Activity Guidelines which recommend at least 60 minutes of moderate to vigorous physical activity every day.

Data collected from 2012-2013 show that only **30%** of Durham Region elementary school students and **20%** of Durham Region secondary school students met the daily recommendation of 60 minutes of moderate to vigorous intensity physical activity (OSDUHS, 2014). Daily physical activity significantly decreases as grade level increases, from a high of **27.8%** among grade eight students to a low of **15.6%** among grade 12 students (PHO, 2013). Of the top chronic diseases, **15-39%** can be attributed to physical inactivity, and the total economic burden of physical inactivity in Canada is estimated to be \$10.8 billion dollars (Krueger, Krueger & Koot, 2015).

In response to the current physical activity status of children and youth in Durham Region, PHNs build capacity of school communities to create environments supportive of physical activity, in collaboration with local school boards, school health champions and students. This objective aims to increase physical activity levels of students, increase awareness and build capacity of educators and child care providers, promoting physical literacy, outdoor play and reducing sedentary time for children aged 0-17 years.

To date, PHNs have been involved in the following accomplishments:

- Building capacity in school communities:
 - 11 schools received a Healthy School Award for using the comprehensive healthy school approach to address physical activity
 - o 23 schools participated in the Bike to School Week/Bike Month initiative
 - 13 schools implemented a Canada150 inspired play day using the ParticipACTION's Canada150 Play Day School Tool Kit
 - 26 schools worked on physical activity initiatives during the 2016-2017 school year, including family fitness nights and promoting physical activity at Welcome to Kindergarten events and during Mental Health Awareness week.
- Raising awareness among educators and child care providers:
 - 40 educators received information about physical literacy at two Durham District School Board Professional Development Day workshops on May 5. The workshops were presented in collaboration with two Health and Physical Education educators.
 - 51 front line staff and supervisors of child care centers attended a Child Care Forum workshop on June 1 at Regional Headquarters. The workshop explored the importance of reducing screen time, developing physical literacy skills and playing outdoors for children ages 0-6 years. Educators identified strategies to help families implement healthy routines in the home.
 - 15 Ontario Early Years Centres staff participated in a workshop on June
 16, in response to results from the Early Development Instrument which

highlighted physical health and well-being as a priority domain in Durham Region. The workshop provided strategies to improve physical health and well-being through physical literacy development and physical activity.

Tobacco Control

To date in 2017, TEOs have completed the required mandatory inspections under the SFOA and ECA in Durham. This includes the first of two required SFOA inspections, the ECA youth access enforcement inspections, a SFOA display and promotion inspection, and inspections in response to complaints related to smoking in prohibited places. Services to residents and businesses in Durham's northern communities have been enhanced by relocating two TEOs from the Whitby office to the Port Perry office.

The DRHD is awaiting MOHLTC approval for the posting and distribution of mandatory signage with respect to the use of e-cigarettes in public and/or prohibited places. In the interim, TEOs continue to dialogue with local municipalities.

Tobacco Use Prevention

In Durham Region, approximately **14%** of adults are current smokers (RRFSS, 2015). This equates to about **65,000** adults smoking in Durham. Approximately **70%** of these smokers report they have an intention to quit smoking (RRFSS, 2015).Tobacco use remains the leading cause of preventable illness and death in Ontario (SFO SAC, 2016).

WNTD was celebrated across Durham Region on May 29 to June 2 with the theme: "It's never too late. You have options. We can help." Focus was on how challenging it is to quit the addictive nature of nicotine in a cigarette and each quit attempt is one step closer to becoming a non-smoker.

Promotion of WNTD included: 1 media release; 1 Corporate e-newsletter submission; 1 website page creation; 1 poster creation to share with community stakeholders, workplaces and schools; 3 community displays in 3 municipalities (Whitby, Oshawa, Clarington); and Twitter and Facebook posts. WNTD materials were also promoted to 58 Durham Region workplaces.

PREVENTION OF INJURY AND SUBSTANCE MISUSE

Child Injury Prevention

Injuries are the leading cause of hospitalization and death for children in Canada. Low income and poor housing conditions are factors that can often place a family at a greater risk for childhood injury (Parachute, 2017). In Durham Region, injuries are the leading cause of trips to the hospital for young children (0-4 years); falls are the top reason for these visits (DRHD, Injury Data, 2014). In 2014, there were **35,188** children, 0-4 years of age injured in Durham Region (Durham Data, 2015).

Child Summer Safety Campaign

In recognition of National Child Safety week June 5-11, DRHD completed a child summer safety campaign. The goal of the campaign was to highlight the importance of protecting children from drowning over the summer. A media release was sent out on June 6 which resulted in 1 Durham Radio News interview. Social media messages promoting child safety ran on the DRHD social media accounts from May 29 to July 1, resulting in a reach of **14,975** people, including **616** engagements. In addition, **2** bus shelter ads promoting water safety ran in priority neighbourhoods within Whitby and Ajax.

Promotion of child safety resources by PHNs in their assigned schools and community resulted in child injury prevention education occurring at **4** elementary schools, **1** community group, **4** community events and at **30** home visits. Newsletter inserts highlighting child safety messaging and targeting healthcare and childcare providers were promoted in **2** DRHD publications.

Concussion Prevention in Sports

In 2014-2015, **10%** of Durham Region students reported a sports related head injury (OSDUHS, 2015). The new Canadian Guideline on Concussion and Sport (2017) stresses the continued need to improve concussion education and awareness.

In an effort to reduce sport related concussions, DRHD is collaborating with sports associations and recreation departments to provide concussion prevention education sessions, and support in developing concussion policy, in order to educate and guide coaches, parents, athletes and recreation staff. On June 1, PHNs provided 1 concussion education session for **18** Town of Whitby Parks and Recreation staff leaders in preparation for their summer sports activities. Additionally, the DRHD provided consultation with the Town of Whitby Parks and Recreation Department on the development of their concussion prevention policy, to be used by coaches, trainers, parents and athletes at the beginning of each sports season.

Helmet Safety

According to the DRHD reports: Injuries at a Glance (2014 & 2015), close to **1,000** Durham Region residents visit the ED yearly due to cycling-related injuries. Helmets, when worn properly, can help to greatly reduce the risks of head, brain and severe brain injury.

June is recognized as Brain Injury Awareness month, and includes Bike to School week. DRHD supported the June themes by promoting helmet safety and concussion prevention. A media release was sent out highlighting the importance of wearing a helmet when cycling to greatly reduce the risk of head injury. This resulted in **1** interview with Durham Radio and **1** interview with Global Durham (television). Social media messages promoting concussion prevention and helmet safety ran from May 22 to June 30 on the DRHD social media accounts, resulting in a reach of **16,240** people, including

2,532 engagements. In addition, **3** interactive helmet safety and concussion prevention activities were developed to support schools and community partners in promoting helmet safety with their students and clients. PHNs presented these activities at **12** schools and at **2** community events. Additionally, the DRHD, in collaboration with Durham Safety on Wheels coalition, planned and implemented the annual Bicycle Fun & Safety Day event on May 27 at Kids' Safety Village, resulting in **6** interactive helmet safety education sessions offered to parents and children.

Hot Beverage Policy

Burns are the third leading cause of hospital admissions from injury for children aged 0-4 years (Parachute, 2017). Joining forces to address this health issue, DRHD collaborated with Durham Region Social Services child care site supervisors to create a Hot Beverage Policy to be implemented at 7 Regional child care centres. The policy was initiated to ensure that Regional childcare sites support safe environments for children in care by adhering to evidence-based recommendations on burn and scald prevention for children.

Respectfully submitted,

Original signed by

Jean Nesbitt Director, Public Health Nursing and Nutrition Chief Nursing Officer

Original signed by

Ken Gorman Director, Environmental Health



ENVIRONMENTAL HEALTH AND EMERGENCY PREPAREDNESS PROGRAMS

REPORT FOR JUNE - AUGUST 2017

FOOD SAFETY

As of January 1, 2017, the HMCA required owners/operators of all regulated food service premises with **20** or more locations in Ontario to post calories for their standard food items. PHIs began compliance inspections in April 2017 of all regulated food services premises and approximately **47%** (**359** of **767**) of these premises have been inspected. The remaining inspections will be completed before the end of the year. A response from the MOHLTC for the application for one-time funding is expected soon.

PHIs have identified **386** infractions to date. The majority of the infractions are related to how the calories are being displayed and contextual statements. These initial inspections are taking a considerable amount of time as the requirements may be complex for some establishments. PHIs continue to work collaboratively with the owners/operators of food premises to achieve compliance. No warnings or charges have been issued to date for the HMCA.

Throughout the summer months, DRHD participated in a number of MOHLTC led engagement opportunities to establish an information sharing process to support common approaches to the enforcement of the HMCA across all PHUs in Ontario. This resulted in a new HMCA on-line portal and discussion forum now available to all PHUs. PHUs are able to log into a MOHLTC on-line discussion forum and portal to discuss common questions and issues. The expectation is that this tool will support a consistent approach to enforcement of the HMCA going forward.

ONTARIO BUILDING CODE, PART 8

The OBC was amended by Ontario Regulation 315/10 which establishes and governs mandatory on-site sewage system maintenance inspection programs to be administered by principal authorities (e.g., municipalities, PHUs and/or conservation authorities) in certain areas.

Inspections were initially required in specific areas located within 100 metres of the Lake Simcoe shoreline. In 2013, DRHD entered into an agreement with the Township of

Brock to conduct inspections under Phase I of the *Lake Simcoe Protection Act*. Between 2013 and 2015, approximately **310** inspections were completed. Phase II of the *Lake Simcoe Protection Act* extends to land located within 100 metres upland of other lakes or ponds and permanent rivers and streams in the Lake Simcoe watershed.

Both the Townships of Brock and Uxbridge entered into agreements with the DRHD for the management of this program within their respective jurisdictions. Two summer students were hired and conducted a total of **298** inspections (**121** in Brock Township and **177** in the Township of Uxbridge) between May and August 2017. **One** sewage system in each municipality required subsequent inspection and follow-up due to a potential sewage system malfunction. The mandatory sewage system maintenance program will continue in the summer months in 2018 in both Townships.

PUBLIC HEALTH EMERGENCY PREPAREDNESS

The HDEMP was updated in 2016 to incorporate IMS principles. HOC members attended a series of training sessions including a half day orientation to the updated plan, a Harris Radio training session, and a one day workshop facilitated by P HO on the IMS. The HOC supports the Health Incident Management Group to effectively direct, coordinate, communicate and support DRHD staff in their emergency response operations.

On May 30, 2017 a HOC exercise was conducted that provided an opportunity to evaluate and validate the HDEMP and provide recommendations for improvements. In addition, a mock evacuation centre was set up with PHNN team leaders and a Sr. PHI to simulate scenarios at an actual evacuation centre. All participants found the exercise valuable as it provided an opportunity to review the HDEMP and roles and responsibilities in responding to an emergency. An After Action Report will be reviewed and recommendations implemented to improve DRHD's response to emergencies. The DRHD will also participate in the upcoming OPG/Province-led "Exercise Unified Command" scheduled for December 6/7, 2017.

A process has been implemented to ensure that all new all new child care centres located within the 10km primary zone are flagged to ensure KI pills are pre-distributed to these centres in accordance with established practices. EH has produced a <u>KI Tablet</u> <u>Information Video</u> as part of its communication and awareness campaign. This video follows a family reviewing storage of their KI pills, includes information on how or when the pills should be used, where more pills can be obtained, and advises viewers that more information is available on the preparetobesafe.ca website. The video is posted on the DRHD YouTube channel and will be shared with key stakeholders and through a social media campaign scheduled for September.

SAFE WATER

Adverse Water Quality Incident Reports

As per the OPHS and the *Drinking Water Protocol*, boards of health are required to receive reports and respond to adverse events such as reports of AWQIs on drinking

water systems governed under the HPPA. To date, DRHD has received approximately **79** AWQI reports resulting in the issuing of **23** Boil Water Advisories/Boil Water Orders and Drinking Water Advisories.

The goal of this requirement under the OPHS is to enhance the level of awareness and knowledge of drinking water safety with owners/operators of drinking water systems and to address reports of AWQI by taking action to ensure a safe and healthy environment for the users of these drinking water systems.

Bathing Beach Monitoring Program

EH collects bacteriological water samples from public beaches to determine if they are safe for swimming in accordance with the *Recreational Water Protocol* of the OPHS. During the 2017 season, a total of **13** public beaches were tested and **845** samples were sent to the PHOL to determine *E. coli* levels. The results are analysed and compared to the provincial standard of 100 *E. coli*/100 mL. Results are posted every week on the Region's website, and are communicated via social media and media advisories to assist with public notification of beach postings. A total of **39** postings were issued for **9** beaches indicating that a beach was unsafe for swimming due to *E. coli* levels and **7** postings were issued for one public beach for the presence of blue-green algae.

Respectfully submitted,

Original signed by

Ken Gorman Director, Environmental Health



FAMILY HEALTH PROGRAMS

REPORT FOR JUNE - AUGUST 2017

INFANT AND CHILD DEVELOPMENT

ICD provides home-based, early intervention services for infants and young children birth to five years of age with, or at risk for, delayed development or disabilities.

Waitlist management strategies continue to play a significant role in identifying those children and families whose needs indicate high priority for access to service. As well, a new service model has been introduced which provides primary service for infants birth to three years of age, with limited service for young children three to five years of age. The model of limited service during the preschool period focuses on consultation, service navigation, and developmental screening at key intervals to support the transition into school. As a result, ICD has been able to provide more timely service for infants birth to three years.

Currently, there are **100** infants and young children waiting for service with an average wait time of **2** months for program intake. As of September 1, there were **290** referrals to ICD with **82%** of these referrals for children less than 12 months of age. Early identification and intervention is crucial for infants and young children presenting with developmental delays or risk factors. A current pressure point for ICD service is the lengthy wait for access to the new Ontario Autism Program for young children with ASD. When children are newly diagnosed with ASD, the need for information, service coordination and support becomes overwhelming for families and requires a more intense level of service from ICD.

REPRODUCTIVE AND CHILD HEALTH

Pregnant and parenting women with limited-income are at risk for inadequate nutritional intake and other health consequences during and after pregnancy. Nutrition focused interventions that creatively improve knowledge and skills to help make healthier food choices has proven to be successful when incorporated into existing programs offered

to high-risk populations (Scripa, 2012). In Durham Region, Food 4 Thought is a free drop-in program for young pregnant women and new mothers up to age 26. The program goal is to enhance maternal and fetal health by reducing the risks associated with food security issues. The program focuses on nutrition so as to reduce the incidence of low birth weight, increase the number of breastfeeding mothers, provide linkages to other community services and improve the health and well-being of moms.

DRHD involvement within the Food 4 Thought program represented an opportunity to provide nutrition focused education using the Discover Your Inner Chef curriculum. This DRHD derived curriculum addresses nutritional knowledge, cooking skills and dietary practices, while optimizing food budget decision-making.

A series of **4** education sessions adapted from the Discover Your Inner Chef curriculum were provided to clients attending Food 4 Thought in downtown Oshawa. From June 8 to July 20, a public health nutritionist delivered programming focused on:

- shopping on a budget with the Discover Your Inner Chef food budget kit
- food preparation skills and menu planning with the contents of the Food 4 Thought grocery bag and Canada's Food Guide
- eating healthy on a limited budget with a focus on lentils, seasonal fruit and vegetables and using leftovers
- community resources, including local community gardens.

A total of **17** clients attended the series. Evaluations revealed that clients found the sessions useful, with new knowledge attained. Clients indicated they planned to use their food budget kits, in addition to the online food budgeting resources on durham.ca/foodsecure. Specific evaluation feedback indicated that participants:

- learned new recipe ideas with items in the Food 4 Thought grocery bag
- learned about meat alternatives such as lentils and when/how to use them
- enjoyed the hands on experience of making a stir-fry and fruit wrap and the ideas generated regarding use of leftovers
- learned about seasonal fruits and vegetables, and the price point of seasonal items versus frozen or canned.

Respectfully submitted,

Original signed by

Jean Nesbitt Director, Public Health Nursing and Nutrition Chief Nursing Officer



INFECTIOUS DISEASES PROGRAMS

REPORT FOR JUNE - AUGUST 2017

INFECTIOUS DISEASES PREVENTION AND CONTROL

IPAC Lapses

Five complaints of IPAC lapses in PSS resulted in **4** postings on the Region's website. The most common issues identified were improper cleaning and disinfection of implements, and improper disposal of single-use items, as outlined in the *Infection Prevention and Control Best Practices for Personal Services Settings* document.

The final IPAC lapse report for New Life Midwives was posted indicating that the last outstanding item on the Order had been addressed. Two more compliance checks are scheduled over the next year prior to revoking the Order.

Outbreak Summary

Between June to August, **18** outbreaks in institutions have occurred; **14** respiratory and **4** enteric. The causative agents include: rhinovirus (**8**), no isolate (**5**), parainfluenza (**2**), and **one** each of norovirus and salmonella. **One** outbreak involved a co-infection of coronavirus and rhinovirus.

Reportable Diseases

EH investigated **236** confirmed sporadic reportable diseases from May 1 to August 31. These include in descending order: campylobacter (**74**); salmonellosis (**61**); LD (**26**); cyclosporiasis (**18**); influenza (**17**); giardiasis (**13**); amebiasis (**11**); **5** each of legionellosis and yersiniosis; **3** each of cryptosporidiosis and shigellosis; **2** each of malaria and west nile virus; **1** each of hepatitis A, typhoid fever and verotoxin producing E.coli including HUS.

Vector-Borne Diseases

The VBD staff working in the WNV prevention and control program conducted over **1,500** assessments of stagnant water sites resulting in over **290** treatments by the

licensed pest control contactor. The **3** rounds of larvaciding for the regional and municipal roadside catch basins began in June and were completed in August.

DRHD staff also conducted adult mosquito surveillance activities which involved setting weekly traps in **13** secure locations throughout the Region and sending them for species identification and WNV testing. A total of **12,187** mosquitos (**419** batches) were captured to date resulting in **10** mosquito batches (pools) testing positive for the WNV in **5** municipalities (Ajax, Oshawa, Pickering, Scugog and Whitby). In Ontario **333** mosquito pools have testing positive for WNV to date. This season, there have been **2** human cases of WNV reported to DRHD and **24** human cases reported in Ontario to date.

LD surveillance has resulted in the submission of **118** ticks for identification and LD testing. A total of **28** ticks were identified as black-legged ticks, of which **7** tested positive for the LD bacteria. During the 2017 season **26 human** cases of LD have been reported to the DRHD compared to **24** reported human cases in 2016.

During this season DRHD distributed a weekly **VBD in Durham Region Summary Report,** which summarizes the weekly and year to date surveillance indicators for both LD and WNV. This report is shared with key stakeholders throughout the Region and posted on the Regional website. The work related to LD and WNV has increased dramatically over the last year and continues to increase to meet the needs of residents. Staff resources have been temporarily reallocated from other program areas to meet these needs. Additional seasonal PHI resources will be required in the future to meet these growing demands.

RABIES PREVENTION AND CONTROL

To date **954** reports of animal bites have been investigated, which is an increase from the **909** reports during the same time period in 2016. DRHD issued **93** anti-rabies treatments to victims. In 2016 a total of **127** treatments were issued for the entire year.

DRHD has submitted a total of **39** animals for rabies testing in 2017 compared to **49** submissions for 2016. To date, no animals tested positive for the rabies virus in the Region this year. In 2016 **one** bat tested positive for rabies.

DRHD continues to collaborate, coordinate, and promote low-cost rabies vaccination clinics with the local veterinary community. In 2017 a total of **7** scheduled low-cost rabies vaccination clinics have been held in the Region. These were offered in Pickering (**2**), Whitby (**2**), Oshawa (**2**) and Clarington (**1**).

EH is providing comments to the MOHLTC on revisions to the *Rabies Prevention and Control Protocol* as part of the overall OPHS modernization process.

SEXUAL HEALTH

HIV/AIDS is a sexually transmitted and blood-borne viral infection that is spread through sexual contact with an infected person, blood to blood transfer, as well as through breastfeeding. In 2016, Health Canada approved an HIV PrEP medication for the prevention of HIV type 1 in conjunction with other HIV prevention methods (e.g., condom use). PrEP is a medication (Truvada®) that provides protection against HIV type 1 in **63-75%** of heterosexual couples and in **72-92%** of homosexual couples. Barriers to accessing PrEP continue to exist among high-risk populations. The primary barrier is the lack of knowledge of PrEP among populations at risk of HIV infection.

To address the knowledge barrier, community agencies (i.e., Lakeridge Health Positive Care, AIDS Committee of Durham Region, and DRHD) implemented a PrEP awareness campaign. The campaign consisted of promotional posters, a website, and a champion from the LGBTQ population who provided his experience taking PrEP.

The website http://www.prepindurham.ca/ was launched on April 1 and includes information on PrEP, how it works, and other sites to visit for more information. As well, **6** community partners provided information on PrEP to high-risk populations. A peer-to-peer promotion strategy was also utilized; a community champion with first-hand experience on PrEP was interviewed and participated in promotion efforts.

Following the launch of the website, an evaluation indicated there were **237** first time visits and **16** return visits to the site. The website will continue to operate and be monitored. Plans are being developed to increase awareness of PrEP to community physicians in collaboration with community partners.

VACCINE PREVENTABLE DISEASES

Vaccine Storage and Handling

In order to ensure publicly funded vaccines are stored and handled properly, DRHD, in accordance with the Ontario Public Health Standards, inspects all fridges that store publicly funded vaccines on an annual basis. The total value of vaccines received, stored and handled in Durham Region (this includes community sites and DRHD locations) between January and September is **\$7,937,009.68**. Routine inspections and monthly inventory management of all sites that store and handle publicly funded vaccine have improved health care providers' vaccine storage and handling practices, which contributes to increased vaccine safety.

From January 1 to September 1, PHNs responded to **100%** of cold chain failures. The DRHD continues to provide ongoing communication, education and support to sites which store publicly funded vaccine. This is done through in-person education during site visits as well as newsletters and fact sheets distributed on a regular basis. Health care providers and staff responsible for vaccine storage and handling must also complete the Vaccine Storage and Handling online learning module posted on the DurhamMD website.

Currently there are a total of **392** sites that store publicly funded vaccine in Durham Region. As of September 7, a total of **370** sites that store publicly funded vaccines have been inspected. Of this total, **349** (**94.3%**) sites passed the inspection, **12** (**3.2%**) received a conditional pass, and **9** (**2.4%**) failed the first inspection. Provision of additional education and support by PHNs resulted in **370** (**100%**) of sites receiving a pass. As well, **66** cold chain failures occurred in Durham Region from January 1 to September 1. The cold chain failures resulted in a total of **\$548,848.29** worth of vaccine exposed, and of this amount **\$58,126.37** was wasted. In order to decrease the amount of vaccine exposed and wasted, PHNs provide additional support and education to these sites in order to implement strategies to reduce cold chain failures. To ensure proper storage and handling in the DRHD vaccine fridges, compliance with vaccine storage and handling protocols is maintained, regular maintenance is performed and fridges are replaced as required.

World Hepatitis Day

World Hepatitis Day was celebrated around the world on July 28, 2017. Viral hepatitis is one of the leading causes of death worldwide. In Canada, there are about **600,000** people living with hepatitis B or C every year, and almost half are unaware of their status. Early detection, prevention and medical treatment are vital to support the elimination of viral hepatitis. The theme in Canada for 2017 was "Know your Status? Get Tested – Learn Your Options".

Educational displays were set up in multiple locations across Durham Region (Ajax Welcome Centre, Durham Region Headquarters, Oshawa Sexual Health Clinic and Pickering Sexual Health Clinic). Additionally, an article about hepatitis was submitted for publication in the July edition of the Welcome Centre newsletter.

Two Registered Nurses participated in the World Hepatitis Day event in Memorial Park in Oshawa on July 28. CAREA community health centre hosted the event. The event provided community members an opportunity to discuss hepatitis testing, treatment, immunization and Sexual Health Clinic services. The nurses also networked with community partners.

Social media messages regarding hepatitis prevention, immunization, transmission, treatment, and the importance of testing for hepatitis were sent out throughout the day. The Facebook posts on Durham Healthy Families reached **8,767** people.

Respectfully submitted,

Original signed by

Jean Nesbitt

Director, Public Health Nursing and Nutrition Chief Nursing Officer

Original signed by

Ken Gorman Director, Environmental Health



PROFESSIONAL AND ADMINISTRATIVE SERVICES

REPORT FOR JUNE - AUGUST 2017

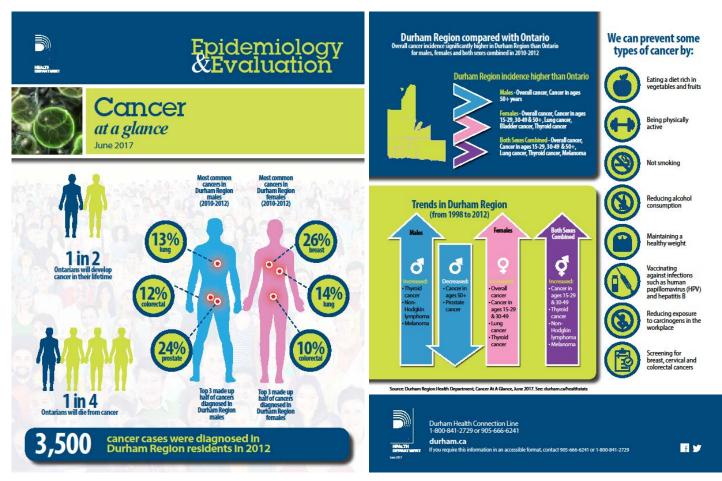
AT A GLANCE RESOURCES

Cancer At A Glance

There were 3,500 cancer cases diagnosed in Durham Region residents in 2012, with 84% of these occurring in people aged 50 or older. The Cancer At A Glance report provides incidence rates and counts of newly diagnosed cases of selected cancers for Durham Region with comparisons to Ontario. An infographic summarizes key points in a graphical format.

Highlights:

- The most common cancers in males were prostate, lung and colorectal with these three accounting for half of new cancer cases. The most common cancers in females were breast, lung and colorectal, which make up half of all newly diagnosed cancers in Durham Region females. This is similar to Ontario and Canada.
- Overall cancer incidence rates were significantly higher in Durham Region than Ontario for males, females and both sexes combined in 2010 to 2012.
- Durham Region males had higher rates than Ontario for overall cancer and for cancer in ages 50 and older (2010 to 2012). While incidence rates increased for thyroid cancer, non-Hodgkin lymphoma and melanoma, males also experienced decreased rates of prostate cancer and cancer in ages 50 and older from 1998 to 2012.
- Durham Region females are of particular concern as they had higher rates than Ontario for all cancers combined, lung, bladder and thyroid cancers, and in all age groups, except children, in 2010 to 2012. Lung cancer and thyroid cancer incidence increased in both Durham Region and Ontario females from 1998 to 2012. Lung cancer findings suggest that smoking may be an important risk factor for Durham Region females.
- Melanoma incidence increased both locally and provincially and was significantly higher in Durham Region than Ontario for both sexes combined.
- We can prevent some types of cancer by eating a diet rich in vegetables and fruits, being
 physically active, not smoking, reducing alcohol consumption, maintaining a healthy weight,
 vaccinating against infections such as HPV and hepatitis B, reducing exposure to carcinogens
 in the workplace and screening for breast, cervical and colorectal cancers.



durham.ca/departments/health/health_statistics/cancerAtAGlance.pdf

Infant Feeding At A Glance

The Infant Feeding At A Glance Report (2006 to 2016 Births) provides information on selected infant feeding indicators from the Durham Region IFSS.

The IFSS was launched by the DRHD in 2007 to regularly assess infant feeding practices of Durham Region mothers. From 2007 to 2016, 6,655 new mothers completed this telephone survey.

In 2016, 95% of mothers initiated breastfeeding; by six months, 61% were still breastfeeding and 8% were exclusively breastfeeding. Breastfeeding initiation rates remained stable from 2007 to 2016; both breastfeeding and exclusive breastfeeding rates at six month postpartum have increased since 2011.

durham.ca/departments/health/health_statistics/infantFeedingAtAGlance.pdf

Injuries At A Glance

The hospitalization and ED visit rates due to cycling injuries are higher in males than females. In 2015, there were over 900 ED visits in Durham Region residents due to cycling injuries.

durham.ca/departments/health/health_statistics/injuriesAtGlance_cycling.pdf

Mental illness At A Glance

In 2015, 3,723 Durham Region residents were hospitalized at least once due to mental illness. Adults 65 and older accounted for 22 per cent (809 out of 3,723) of the total while youth accounted for 13

per cent (478 out of 3,723). The rate in Durham Region young females saw a three-fold increase since 2007. The rates in young females aged 15 to19 in Durham Region are consistently higher than the rates for males and higher than the provincial rates.

durham.ca/health.asp?nr=/departments/health/health_statistics/mentallllnessAtAGlance.htm&setFoot er=/includes/health/healthFooterDHCL.inc

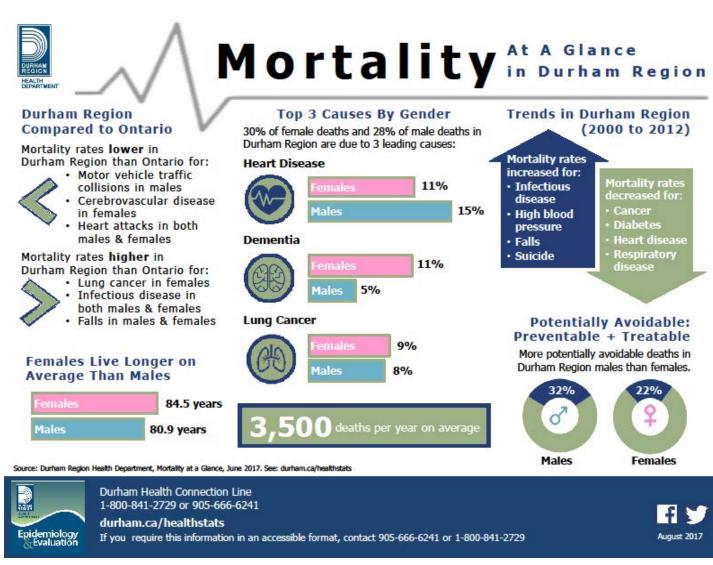
Mortality At A Glance

The Mortality At A Glance resource has been updated with 2012 mortality data for Durham Region and Ontario. This resource includes counts and rates for selected causes of death of relevance to public health programming. This resource is updated on an annual basis as new data is provided by the MOHLTC.

Ischemic heart disease or heart attacks were the leading cause of death in males and females in Durham Region and Ontario from 2010 to 2012. Lung cancer was the second leading cause of death among males, and dementia and Alzheimer's disease was the third. These three causes accounted for 28% of deaths in males. Among females dementia and Alzheimer's disease was the second leading cause of death and lung cancer was the third. The top three causes accounted for 30% of deaths in females.

Mortality rates are higher in Durham Region than Ontario for infectious diseases and falls in both sexes, and lung cancer and COPD in females. Mortality rates are lower in Durham Region than Ontario for ischemic heart disease in both sexes and cerebrovascular disease and motor vehicle traffic collisions in males. While mortality rates for most diseases in the report have shown a decreasing trend since 2000 in both Durham Region and Ontario, mortality rates from infectious diseases, high blood pressure, falls and suicide have been increasing.

In Durham Region and Ontario, the percentage of all deaths that were potentially avoidable declined slightly between 2000 and 2012 among both males and females. More deaths were potentially avoidable among males than females. Durham Region was similar to Ontario.



durham.ca/departments/health/health_statistics/mortalityGlance.pdf

Neonatal Abstinence Syndrome At A Glance

Since 2002, the incidence of NAS in Durham Region has increased. By 2016, there were 34 deliveries of infants with NAS.

durham.ca/health.asp?nr=/departments/health/health_statistics/nas.htm&setFooter=/includes/health/h ealthFooterDHCL.inc

FACTS ON...

The following recently released **Facts on Reports** present trends over time, PHU and Provincial comparisons.

Birth Control Use in Durham Region

Between 2013 and 2014, 84 per cent of Durham Region residents 24 and under reported they usually used birth control with their partner in the past year. Rates for both Durham Region and Ontario remained the same since 2003.

durham.ca/departments/health/health_statistics/factsOn/factsOnBirthControlUse.pdf

Passenger Seat Belt Use in Durham Region

According to the 2013/2014 CCHS, 85 per cent of Durham Region residents 12 and older always wore their seat belt when riding as a passenger in a car, truck or van. Adults 65 and older and females were most likely to always wear their seat belt. Rates for both Durham Region and Ontario increased since 2003.

durham.ca/departments/health/health_statistics/factsOn/FactsOnSeatBeltPassenger.pdf

Seat Belt Use While Driving in Durham Region

According to the 2013/2014 CCHS, 93 per cent of Durham Region drivers 16 and older reported always wearing their seat belt. Females were most likely to report always wearing their seat belt. Rates for both Durham Region and Ontario increased since 2003.

durham.ca/departments/health/health_statistics/factsOn/factsOnSeatBeltUseWhileDriving.pdf

Youth Sexual Activity

Results from the 2013/2014 CCHS revealed that 23 per cent of Durham Region youth aged 15 to 19 had ever had sexual intercourse. This figure is similar to Ontario and decreased between 2003 and 2013/2014.

durham.ca/departments/health/health_statistics/factsOn/facstOnYouthSexualActivity.pdf

QUICK FACTS

4 Quick Facts reports are posted to durham.ca. These reports present local information on elementary and secondary school students' health behaviours.

Antisocial Behaviour

For the 2014/2015 school year, the most frequently reported non-violent antisocial behaviours in Durham Region students were arson, at 11 per cent and running away from home, at eight per cent. These estimates were similar to Ontario.

durham.ca/departments/health/health_statistics/quickFacts/antisocialBehaviour.pdf

Elevated stress

More than one in ten elementary school students and nearly four in ten secondary school students experienced elevated stress in the month prior to the survey.

durham.ca/departments/health/health_statistics/quickFacts/ElevatedStress.pdf

Illicit Drug Use

While over 30 per cent of secondary school students in Durham Region use cannabis, one in 10 also report using ecstasy at least once in their lifetime.

durham.ca/departments/health/health_statistics/quickFacts/Illicit_Drug_Use.pdf

Perceived Drug Availability

Four out of five secondary schools students report that alcohol is easy to get if they wanted it.

durham.ca/departments/health/health_statistics/quickFacts/perceivedDrugAvailability.pdf

ETHICS

In the period of May – September 2017, two research proposals were reviewed by the Ethics Review Committee; no studies were approved during this time.

Respectfully submitted,

Original signed by

R.J. Kyle, BSc, MD, MHSc, CCFP, FRCPC, FACPM Commissioner & Medical Officer of Health



PARAMEDIC SERVICES

REPORT FOR JUNE - AUGUST 2017

ADMINISTRATION

John Riches has been appointed to the Superintendent of Professional Standards position, which was a vacancy left open by Denise Ingram's retirement in April. John is the Paramedics Services' lead for DRHD's upcoming accreditation as well as the lead for RDPS' MOHLTC Service Review which will take place in November of this year.

OPERATIONS

We have begun the process to hire three Operations Superintendents to fill vacancies which resulted from three retirements earlier in the year. We are confident the positions will be filled by mid-November.

Lakeridge Health has contracted RDPS to have a staffed ambulance at the Port Perry Hospital 24/7 to provide support during the closure of the site due to a fire earlier in the month.

We anticipate our eleven paramedics that have gone through the ACP training will be fully certified by the end of October.

QUALITY DEVELOPMENT

Obstetrical emergencies are now competencies listed under the Advanced Life Support Patient Care Standards. As part of our paramedics' certification they will be taking part in an eight hour class involving both didactic work and practical scenarios addressing a number of obstetrical presentations as well as a review of neonatal resuscitation and assessments.

LOGISTICS

Construction of our new Sunderland Paramedic Response Station will be delayed by approximately three weeks. Substantial completion and commissioning of the building should occur by the end of November.

With the support of Council and the assistance of the Finance Department, RDPS will begin taking possession of our new Stryker Power cots later this fall. Production should commence by the middle of October and will be completed prior to year end.

Respectfully submitted,

Original signed by

Troy Cheseboro Chief/ Director

DURHAM REGION

Interoffice Memorandum

Date: September 22, 2017

To: Committee of the Whole

From: Dr. Robert Kyle

Health Department

Subject: Review of the Ontario Ambulance Communications Delivery Model

The Ministry of Health and Long-Term Care (MOHLTC) engaged Deloitte to evaluate Ontario's current ambulance communications delivery model and develop a series of options for the optimal delivery model for land and air ambulance communications in the province. Deloitte's report entitled, Review of the Ontario Ambulance Communications Delivery Model (attached), was shared with Durham Region Paramedic Services on August 15, 2017. Deloitte engaged key stakeholders across the province to inform the review, including municipalities, associations, paramedic services, local health integration networks (LHINs), and Central Ambulance Communications Centres (CACCs).

In summary, the report includes the context for the review, a review of the current model of ambulance communications in Ontario, an analysis of performance and HR data for land ambulance dispatch, a jurisdictional review, key priorities for transformation, and three potential options for a future state model for ambulance communications. As part of the review, a model framework and guiding principles were established to inform decision-making.

Key priorities for transformation, as recommended by Deloitte, include: comprehensive performance management; enhanced accountability; integrated technology and information management practices, including provincial standardization of triage methodologies and relevant technology platforms; a focus on HR management and standardization across sites; and health care system integration points including consideration of other referral options for low acuity calls and roles for partner organizations regarding inter-facility transfers.

The three options presented and analyzed in the report include: 1) transformation of the existing dispatch model, in which the 22 current CACCs would be maintained with current boundaries and relationships with existing paramedic services; 2) a regional dispatch model, in which there is a reduced number of CACCs; and 3) a centralized dispatch model. An analysis of each option outlines how it aligns with the guiding principles and the key priorities for transformation, as well as, identifies operational considerations.



The MOHLTC communicated that Deloitte's report will be used to inform next steps in the transformation of emergency health services in Ontario. The Durham Region Health Department will continue to monitor and respond to opportunities to provide input to the emergency health system transformation process.

Respectfully submitted,

Original signed by

R.J. Kyle, BSc, MD, MHSc, CCFP, FRCPC, FACPM Commissioner & Medical Officer of Health

Deloitte.



Review of the Ontario Ambulance Communications Delivery Model

June 2017

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Background and Context The Vision for Change

Vision for Change: Patients First

The government is committed to providing Ontarians with the right care, at the right time, in the right place, that is fiscally responsible and sustainable

- **Patients First: Action Plan for Health Care** was released in 2015 and is focused on the ongoing commitment to put people and patients first by improving the healthcare experience
- The plan highlights four key objectives for the next phase of health care system transformation
 - 1. Access: Improve access providing faster access to the right care
 - 2. Connect: Connect services delivering better coordinated and integrated care in the community, closer to home
 - **3. Inform:** Support people and patients providing the education, information and transparency they need to make the right decisions about their health
 - **4. Protect:** Protect our universal public health care system making decisions based on value and quality, to sustain the system for generations to come
- With the government's commitment to provide patients with the right care, at the right time, and in the right place, there is a growing need for Emergency Health Services to evolve and align with the strategic objectives of *Patients First*
- Emergency Health Services (EHS) is considered a key gateway to the broader health care system and system improvements are underway to align with *Patients First and* other health sector reforms including:
 - A multi-year transformation strategy
 - 2017-18 and 2018-19 planned technology system improvements, including: a new triage tool, upgraded CAD, bi-directional information sharing through central integrated platforms
- The transformation continues the progress towards improving the health system; it is acknowledged that EHS continues to make ongoing changes to operations, therefore findings and recommendations are based on a point in time.

Vision for Change: Enhancing Emergency Services in Ontario In alignment with Patients First, Enhancing Emergency Services in Ontario (EESO) is a multi-year strategic reform of emergency health services

- Enhancing Emergency Services in Ontario (EESO) is a multi-year enterprise initiative that supports the strategic objectives of Patients First by proposing to "*improve and sustain quality co-ordinated care across the patient's journey, and implement more effective medical transportation and paramedic services with all health care delivery partners and providers in Ontario".*
- The EHS system in Ontario is intended to provide timely response of pre-hospital and inter-facility care to address the needs of the sickest patients in 400+ municipalities and First Nations communities with 24/7/365 availability.
- EHS partners play a key role in the seamless delivery of land and air ambulance services, and helping improve access to the health care system.
- With this in mind, EESO is coordinating the EHS system transformation with a broad cross-section of service delivery components:
 - EESO vision for change is built on four key pillars of work: change, integrate, build and oversee .

The "911/811" Future State Roadmap of Ambulance Response

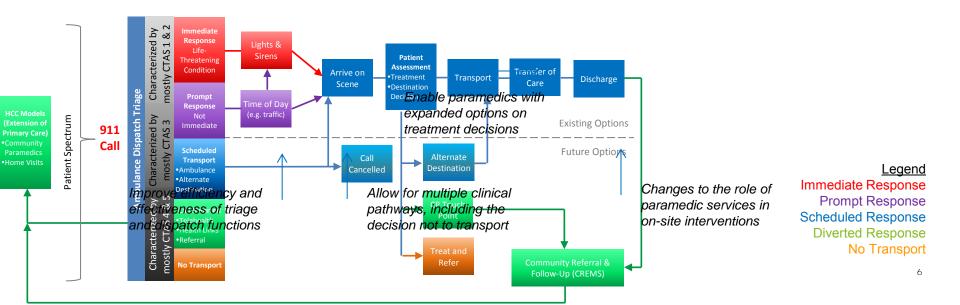
The future vision of patient interactions with the EHS/911 system supports a broader range of clinical pathways based on patient needs

• In alignment with Patients First, the future roadmap for EHS will enable access to the right care at the right time and in the right place.

The **911/**"**811**" future state roadmap shows one segment of the multi-year journey.

Enable the seamless transfer of a patient and his/her records

Better leverage home and community-based care (HCC) options



Background and context

The Emergency Health Services Branch is **committed to improving the patient's** journey through the health care system

- "Central Ambulance Communications Centres (CACCs) are often the **initial access point to Ontario's emergency health services** system for many patients who are ill or **are injured**".*
 - Functions of EHSB include the establishment of province-wide standards, funding and inspection of dispatch services, as well as providing education and training for ambulance communications officers (ACOs).
- The CACC communication model includes both receiving calls and dispatching the appropriate emergency medical response
 - Ambulance call takers receive calls from citizens and health service providers, prioritize the urgency
 of need and provide pre-hospital instructions to the caller
 - Ambulance dispatchers deploy emergency vehicles nearest to the scene to provide pre-hospital care and facilitate transport to the closest, most appropriate health care facility
 - Ambulance Communications Officers (ACOs) coordinate with Ornge Communications Centre (OCC) air and critical care land ambulance transports, which are not accessible through 911
- In 2013 the Auditor General of Ontario made several recommendations regarding ambulance dispatch in Ontario.
- In 2014 the Ontario Association of Paramedic Chiefs approached the Ministry with a range of requests related to changes to the ambulance dispatch model. The Association of Municipalities of Ontario had also requested discussions related to improving ambulance dispatch.
 - In response to these requests, the Minister of Health and Long-Term Care announced that the Ministry would assess improvements to the ambulance dispatch system. The ministry has since began implementing system improvements with three main objectives:
 - Focus on consistency and standardization,
 - Operational improvements focused on efficiency and effectiveness, and
 - Improving quality coordinated care for patients.

Background and context

The Emergency Health Services Branch is **committed to improving the patient's** journey through the health care system

- The provision of air ambulance and related services in Ontario is currently through Ornge, a notfor-profit charitable organization
 - Ornge Communications Officers, with the assistance of on-call doctors, centrally coordinates patient transports via aircraft or critical care land ambulance throughout the province.
- In March 2012, the Auditor General of Ontario released a special report, which raised issues around inadequate oversight of Ontario's air ambulance and related services
 - The Ministry and Ornge have since made significant strides in moving forward to restore public confidence in Ontario's air ambulance service, including the appointment of a permanent President and CEO as well as a new volunteer Board of Directors
 - Additionally, the ministry amended its performance agreement with Ornge to improve transparency and accountability through an increased emphasis on performance standards for operational and financial costs, increased reporting and disclosure of information
 - In July 2012, the ministry established the Air Ambulance Program Oversight Branch (now Air Ambulance Oversight Unit, within EHSB) to provide dedicated oversight over Ornge and to manage all current and future initiatives relating to the delivery of air ambulance related services in Ontario, including ensuring that terms and conditions of the amended Performance Agreement are successfully implemented.
- In July 2015, amendments to the *Ambulance Act* came into effect, which provide the government with the authority to take a number of actions including the ability to:
 - Appoint special investigators or a supervisor when it is in the public interest to do so, similar to the Ontario public hospitals
 - Appoint members to Ornge's board of directors
 - Prescribe terms in the performance agreement between the government and Ornge by regulation;
 - Provide whistle-blowing protection for staff who disclose information to an inspector, special investigator, supervisor, or the ministry

Purpose and Approach

Purpose of the Provincial Assessment

The purpose of this evaluation was to develop a series of options for the optimal delivery model for land and air ambulance communications in Ontario, which:

- Support a robust and flexible organization and delivery structure
- Improve the patient's journey through the health care system
- Ensure a sustainable health care system province-wide

There is currently work underway to reform the emergency health system. The ministry recognized that there are **opportunities for further growth and enhancement of the current system** to better align with *Patients First* and the EESO Future State Roadmap, and key foundational work has begun including planning for the implementation of a new medical algorithm.

Vision for Transformation of Emergency Health Services



The work undertaken to inform this report will be used to identify the next steps in the transformation of emergency health services in Ontario

Project Objectives and Scope

The project scope includes a variety of strategic and operational elements when considering the future needs of Ontarians

Specific objectives included:

- A review of current Emergency Medical Services (EMS) communication and dispatch models across the province;
- A jurisdictional scan evaluating various service delivery models and best practices for land and air ambulance systems outside of Ontario;
- Identification of opportunities to positively optimize resources and impact financial performance;
- Developing options for the optimal delivery model for land and air ambulance;
- Providing advice to the Director, EHSB, concerning the evolution of the organization including timelines, resource requirements, organization redesign and structure;
- Conducting an analysis of human resources (HR) data to determine the drivers for attrition and attendance issues within the land communications centres and field office support structure, and provide strategy/model options to effectively retain resources and enhance attendance

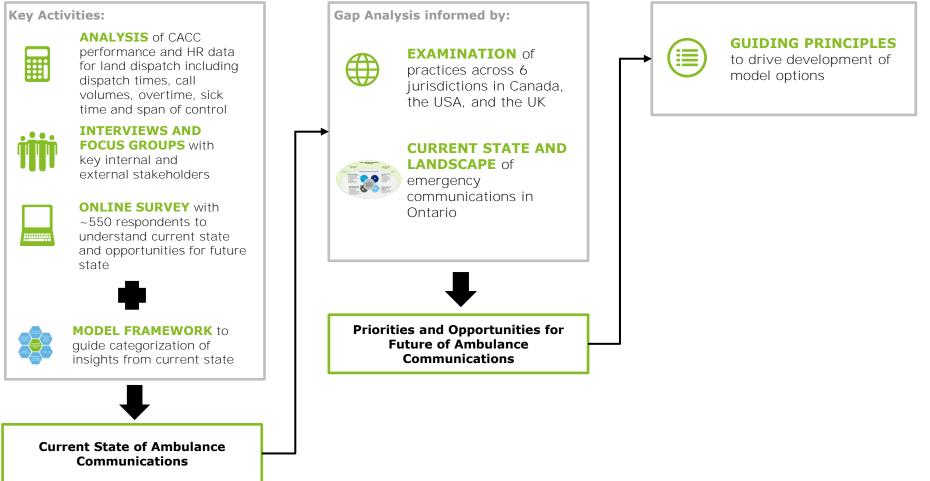
Project Approach and Activities Completed

A model framework guided the activities to shape the current state of ambulance communications and future state model options

Phase 2: Identification of

Priorities and Opportunities

Phase 1: Project Initiation and Current State

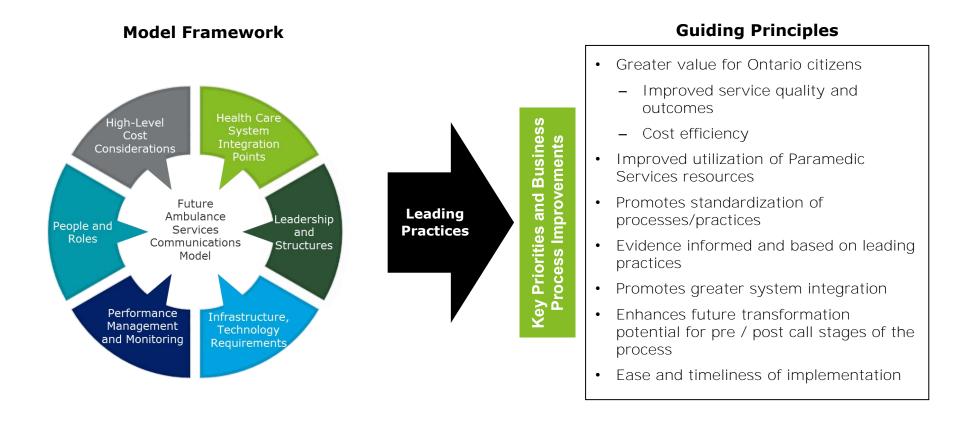


Phase 3: Development of Future

State Model Options

Model Framework and Guiding Principles for Decision Making

We have established a framework to inform future potential models and guiding principles that will inform decision making around the future state



Key priorities are driven from the synthesis of insights captured through the framework, jurisdictional practices, and guiding principles, to support an integrated, sustainable health system

Current State Description of Today's Model

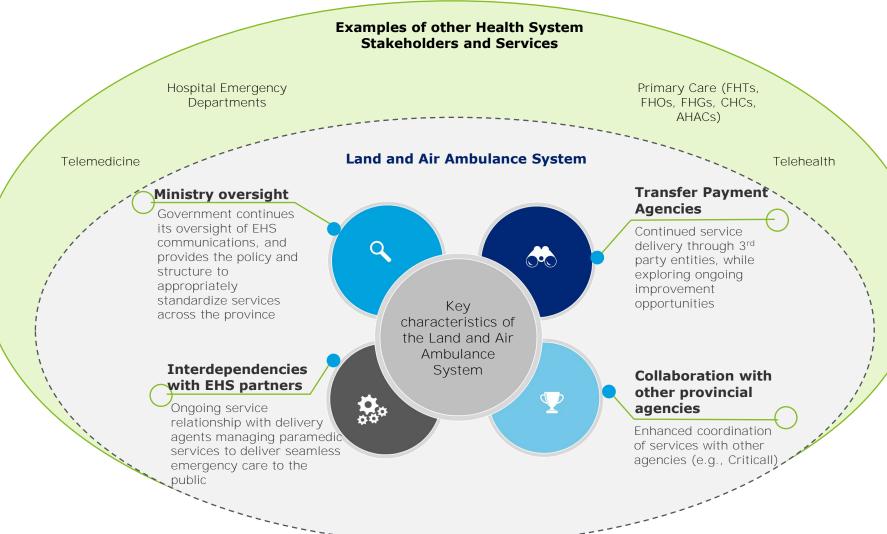
Current Model of Ambulance Communications in Ontario

Our understanding of the current model was informed through analysis of data, interviews with stakeholders, discussions with EHSB leadership and survey responses

Structure	 22 Central Ambulance Communication Centres (CACCs) in Ontario, operating in a hybrid model 11 operated directly by the Ministry 6 operated by Hospitals 4 operated by Municipalities 1 private CACCs communicate with 56 Paramedic Services (PS) providers across the province (50 Upper-tier Municipal services + 6 First Nations services) Ornge Communications Centre - dispatches air ambulance and critical care land ambulance resources.
Funding	 The Ministry currently funds 100% of dispatch centre costs Funding for Municipal PS providers is split 50/50 between Ministry and Municipalities First Nations Paramedic Services are 100% Ministry funded Ministry funds 100% of air ambulance and critical care land ambulance services (Ornge is provider)
Technology/ Supportive Tools	 Computer Aided Dispatch (CAD) technology is used at all CACCs and Ornge dispatch centre to support call taking, triage and dispatch, however varying versions of this technology are in use across CACCs While Medical Priority Dispatch System (MPDS) is used to triage patients at Niagara and Toronto CACCs and, all other CACCs currently use Dispatch Priority Card Index (DPCI) II to inform prioritization of patient needs. Ornge's Flight Vector triages patients using a 5-point scale for acuity

Landscape of Ambulance Communications in Ontario

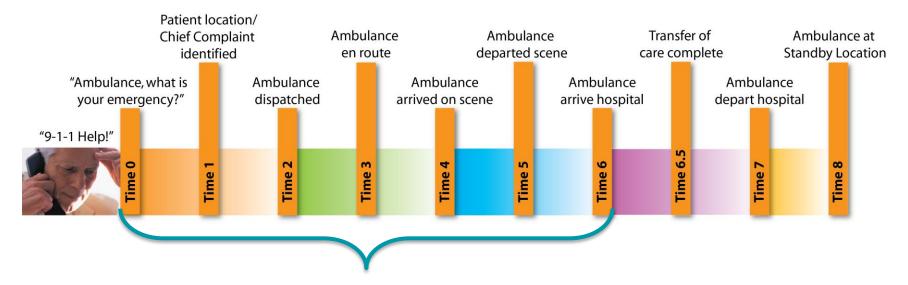
The current environment in which ambulance communications services exists includes direct partners, as well as elements of the broader health care system



Performance Indicators

Description of Land Ambulance Communication Services

Ambulance dispatch is a key part of the emergency response to a 9-1-1 call from the time a call is received by the communications centre, to the delivery of the patient at the appropriate health care facility



The Ambulance Communication Officer triages the call based on answers provided by caller to questions in the medical triage algorithm and remains in contact with the caller providing:

- Pre-arrival first aid and patient comfort instruction
- Reassessment of call priority, determining if further support (including air ambulance) is required
- Patient status updates to paramedics

Upon arrival of Paramedics on scene, the Ambulance Communication Officer may provide:

- Coordinated communication between paramedic and Regional Base Hospital if required
- Notifications to Emergency Department of incoming patient

Dispatch Performance Metrics - Land Ambulance

Dispatch performance is currently monitored through the response time standard data and posted publicly on the Ministry website

Time Intervals:

Time 0 – **Call Received:** time when the ambulance communications officer initially answers the telephone to commence call taking.

Time 2 – Crew Notified: time at which the ambulance communications officer has completed selecting which ambulance resource to assign and provided the ambulance crew with the response code and sufficient call location information (by base page, radio, telephone, belt page, PDA) to begin responding.

Time 4 – Arrived Scene: time at which the ambulance crew advises the ambulance communications officer (by radio or status messaging) that they have arrived at the call's location.

Dispatched Priority Code: 1, 2, 3, and 4

Code 1 – Deferrable Call: A non-emergency call which may be delayed without being physically detrimental to the patient.

Code 2 – Scheduled Call: A non-emergency call which must be done at a specific time due to the limited availability of special treatment or diagnostic/receiving facilities. Such scheduling is not done because of patient preference or convenience.

Code 3 – Prompt Call: An emergency call which may be responded with moderate delay. The patient is stable or under professional care and not in immediate danger.

Code 4 – Urgent Call: An emergency call requiring immediate response. The patient is life, limb or function threatened, in immediate danger and time is crucial.

Canadian Triage Acuity Scale (CTAS) Levels

CTAS Level 1: CTAS level assigned for resuscitation.

- **CTAS Level 2**: CTAS level assigned for emergent.
- **CTAS Level 3**: CTAS level assigned for urgent.
- CTAS Level 4: CTAS level assigned for less urgent.
- CTAS Level 5: CTAS level assigned for non urgent.

Dispatch Performance Metrics – Air Ambulance

Performance for Ornge is monitored according to dispatch and reaction time targets

Dispatch time targets:

Scene calls: Within 10 minutes of receipt of each call (T0), the caller will be advised on status of **Ornge's** ability to dispatch an aircraft

Acute care air transfers: Within 20 minutes of receipt (CO-Medical Patient Details Complete (T1)) of each call, the caller will be advised on status of **Ornge's** ability to dispatch an aircraft

CCLA Transfers: Within 20 minutes of receipt (CO-Medical Patient Details Complete (T1)) of each call, the caller will be advised on status of **Ornge's** ability to dispatch a CCLA vehicle

Reaction time targets:

Ornge aircraft, emergent and urgent calls: If aircraft is fueled, within 15 minutes of pilot's acceptance of the call, Air Traffic Control (ATC) clearance will be requested. If fuel is required, within 25 minutes of pilot's acceptance of the call, Air Traffic Control (ATC) clearance will be requested

SA carriers, emergent and urgent calls: Within one hour of agreed-upon departure time, ATC clearance will be requested

CCLA: Within 10 minutes of request for CCLA response, the CCLA will be mobile

Ornge Triage Acuity Scale

Ornge Triage Acuity Scale (OTAS) differs from CTAS and has been developed specifically for **Ornge's** transport environment

- OTAS is a 5-level triage acuity scale established by **Ornge's** Medical Advisory Committee replacing **Ornge's** 3-point scale (emergent, urgent and non-urgent) as of April 1, 2017
 - This scale is used in deployment decision-making for air ambulance

OTAS Levels and Best Effort Time to Receiver Facility*:

Level 1 - Resuscitation: 4 hours or less, without delay. OTAS 1 calls are to be dispatched without delay and are automatically approved for shift extension or duty out. The most appropriate Critical Care Land Ambulance (CCLA) will be dispatched or aircraft will be weather checked within 10 minutes of Patient Details Complete

Level 2 – Emergent: 6 hours or less. OTAS 2 calls require TMP approval for shift extension or duty out. The most appropriate CCLA will be dispatch or aircraft will be weather checked within 10 minutes of Patient Details Complete

Level 3 – Urgent: 12 hours or less. OTAS 3 calls are not approved for shift extension or duty out pursuant to the current Collective Agreement provisions

Level 4 – Less Urgent: 24 hours or less. OTAS 4 calls are not approved for shift extension or duty out pursuant to the current Collective Agreement provisions

Level 5 – Non-Urgent: 48 hours or less. OTAS 5 calls are planned using the Long Term Planning tool

*Each call is assessed based on circumstances (e.g., weather, patient needs, etc.) and is assessed against all other pending calls for the same/similar assets. Any one of these numerous factors could impact time to Receiver.

Performance and HR Data Analysis for Land Ambulance Dispatch

Performance and HR Data for Land Ambulance Dispatch

Our understanding of the current state was further informed through analysis of performance data for land ambulance and a review of available CACC HR data

Performance Data Findings

- Review of land ambulance performance data included analysis of call volumes, response times by CACC and Priority Code, and total spend from 2014-2016
- It was noted that call volumes have been steadily increasing by over 3% since 2014, with the distribution of call Priority Code remaining consistent
 - The distribution of call volumes across CACCs in Ontario is variable with several CACCs receiving less than 20,000 calls annually
 - Dispatch times across the province ranged from 2.0-3.3 minutes. Based on the overall data, there does not appear to be a direct correlation of performance relative to geography or call volumes.

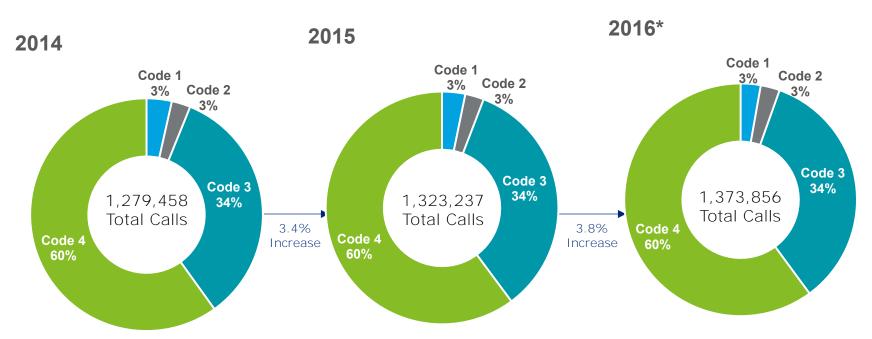
HR Data Findings

• Due to inconsistencies in data collection around attrition, sick time and overtime, we were unable to conduct a detailed analysis of HR data and identify strengths and challenges of the current HR management processes

The following slides provide a detailed view of the performance data analysis as well as a summary of data limitations. Methodology and further analysis can be found in the Appendix.

Ontario Volumes of Calls Received

CACC call volumes have been steadily increasing by over 3% year over year



When data from the Toronto CACC is excluded, the proportion of Code 4 calls increases to ~66% for each year

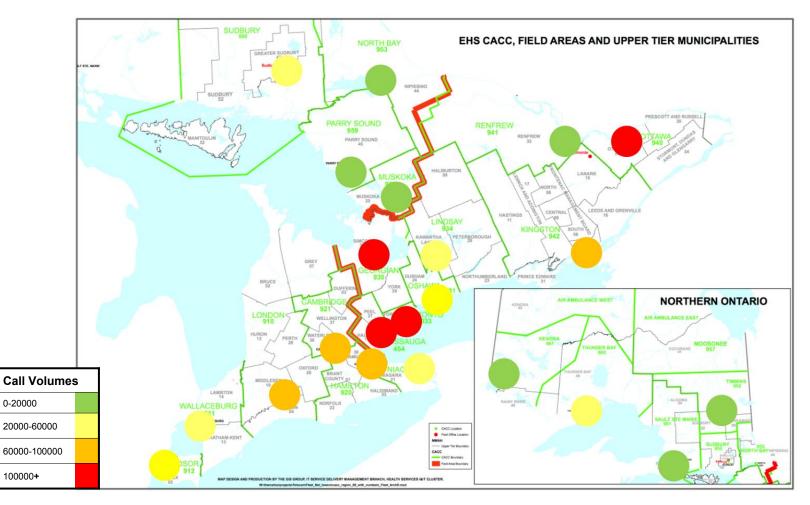
- The proportion of Code 1-4 calls has remained constant year over year from 2014 to 2016
- Majority of calls received are categorized as Code 4
- From 2015 to 2016, Parry Sound saw the largest increase in call volumes (9%) whereas Muskoka saw the largest decrease (8%)
- The Toronto CACC receives the largest number of calls on an annual basis (~273,000 in 2015), accounting for over 20% of total calls received in Ontario

Source: ARIS Reports

*Data from January-September 2016 was used to project the total volume for the year

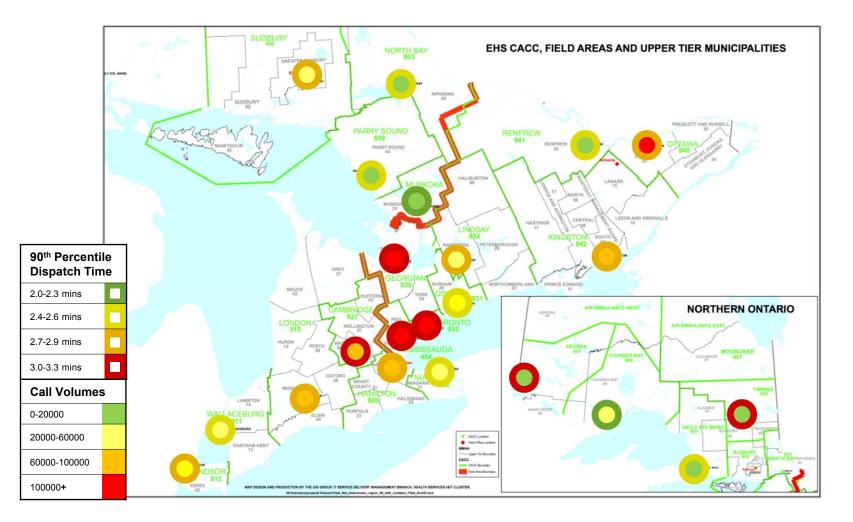
Volumes of Calls Received by CACC in 2016*

- Volumes of calls received by CACC ranged from 3,400 287,000 calls
- The Toronto, Mississauga, Ottawa and Georgian CACCs received the highest volumes of calls in Ontario
- 7/22 CACCs received call volumes < 20,000



Volumes of Calls Received and Corresponding Dispatch Times by CACC in 2016*

- 90th percentile dispatch times across Ontario ranged from 2.0 3.3 minutes
- There appears to be no direct relationship between call volumes and dispatch times



Data Analysis Limitations

A review of performance and HR data revealed a number of challenges, limiting the ability to identify drivers for attrition and attendance issues in CACCs

We sought to review:

- CACC Performance
 - Dispatch and response times across CACCs based on assigned Priority Code
 - Volumes of calls received by CACC
 - Volume of calls dispatched by Priority Code
- CACC Financials
 - Actual expenditures by CACC
- Employee Data
 - Attrition rates across CACCs
 - Attendance issues and associated contributors including:
 - o Total sick time per employee
 - o Overtime hours worked per employee
 - o Span of control

Our findings show:

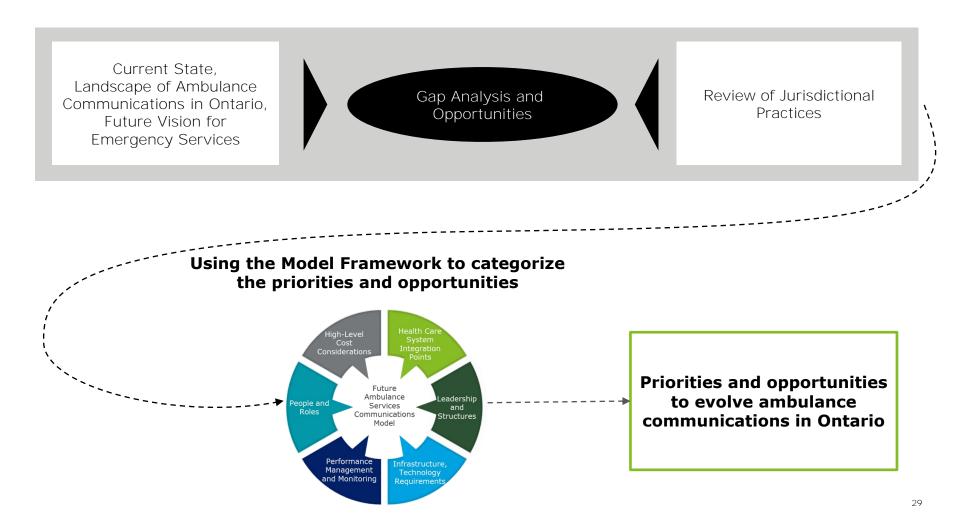
- Inability to compare calls received to calls dispatched due to variability in capturing data across CACCs
- Inability to track details of spend due to consolidated spend data vs. categorization and tracking of dollars
- Challenges in identification of attrition rates across CACCs due to variation in definitions and tracking
- Differences across CACCs in tracking sick time, overtime, and movement of employees within and outside of CACCs
- Inconsistent tracking of reasons for employees leaving CACCs

Due to the variability and inconsistencies in capturing performance and HR data, this review was unable to identify recommendations to retain resources and enhance attendance

Key Priorities for Transformation

Priorities to Inform the Future Model of Ambulance Communications

The synthesis of the current state findings, jurisdictional practices and future vision led to the creation of key priorities to enhance service delivery



Key Priorities for Transformation

The following key priorities are recommended to transform the existing dispatch model to align with the desired future vision for emergency services

The key priorities provide direction to shape the future of ambulance communications, regardless of the stage of transformation. It is recognized that, with the current technology system improvements and the EESO multi-year transformation strategy, the Emergency Health Services Branch has started the journey towards an evolved future and these priorities will allow EHSB to build upon the progress.

Performance Management and Monitoring	 Comprehensive performance management Enhance relevant benchmarks for clinical and service performance targets to drive system performance Implement advanced management reporting systems to enable measurement of tangible KPIs and identification of potential issues, including patient experience indicators Enhance dedicated support/business analysts to conduct more robust performance analysis and identification of trends to inform future planning decisions
Leadership and Structures	 Clear service expectations and accountability Enhance the accountability frameworks by evolving service expectations and performance based contracts to increase accountability for dispatch services Identify appropriate organizational structure including direct governance, armslength oversight, and/or contracted service agreements (may include private organizations)

Key Priorities for Transformation continued

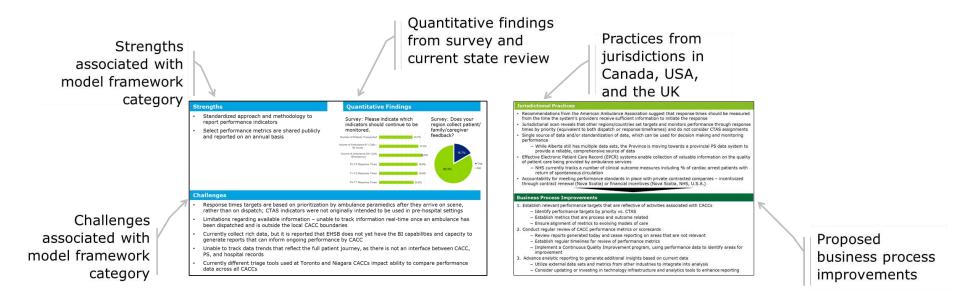
The following key priorities are recommended (and in some cases underway) to transform the existing dispatch model to align with the desired future vision for emergency services

Infrastructure, Technology Requirements	Integrated technology and information management practices
	 Integrate technology between dispatch centres, paramedics, and services that arrange air and inter-facility transportation to support seamless ambulance communication
	 Establish an integrated approach to information management to enable standardized reporting across all centres
	 Implement provincial standardization of triage methodologies and relevant technology platform to support accurate and consistent prioritization of calls
People and Roles	Focus on HR management and standardization across sites
	Standardize policies and procedures across CACCs to enable a consistent approach to delivery of ambulance dispatch services
	 Advance HR management practices with a focus on leadership, succession and retention management
	 Achieve formal accreditation by a sector recognized entities, such as the International Academies of Emergency Dispatch
Health Care System Integration Points	Collaboration with partner organizations and existing structures to enhance emergency health services
	 Revisit roles for partner organizations regarding inter-facility transfers and other relevant services
	 Enhance future vision that includes integration with the broader health system to support the patient journey from pre-hospital to acute care

Understanding key priorities and business process improvements

Suggested key priorities and business process improvements were informed by current state findings and jurisdictional practices

- The model framework guided the collection of current state data and identification of strengths and challenges with the current emergency health services system, which subsequently informed business process improvements
- The visual below illustrates the structure used to present findings and suggested improvements as highlighted on the following slides

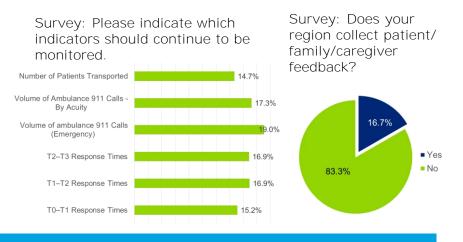


Performance Management and Monitoring

Strengths

- Standardized approach and methodology to report performance indicators
- Select performance metrics are shared publicly and reported on an annual basis
- **Ornge's** CAD system enables accurate reporting of key performance indicators as outlined in the Ministry/Ornge performance agreement

Quantitative Findings



Challenges

- CACC response times targets are based on prioritization by ambulance paramedics after they arrive on scene, rather than on dispatch; CTAS indicators were not originally intended to be used in pre-hospital settings
- Limitations regarding available information unable to track information real-time once an ambulance has been dispatched and is outside the local CACC boundaries
- Lack of comparability between measured targets for land and air
- Currently collect rich data, but it is reported that EHSB does not yet have the advanced business intelligence (BI) capabilities and capacity to generate reports that can inform ongoing performance by CACC
- Unable to track data trends that reflect the full patient journey, as there is not an interface between CACC, Paramedic Services (PS), and hospital records. Although, Ornge has initiated work to track patients journey based on it unique data sets, the interface with land services is not yet captured
- Currently different triage tools used at Toronto and Niagara CACCs impact ability to compare performance data across all CACCs. This issue is mitigated in air ambulance due to a single system coordinated centrally, however it is not comparable to CACC data

Performance Management and Monitoring cont'd

Jurisdictional Practices

- Recommendations from the American Ambulance Association suggest that response times should be measured from the time the system's providers receive sufficient information to initiate the response as the time taken to collect information can be variable depending on circumstances
- Jurisdictional scan reveals that other regions/countries set targets and monitors performance through response times by priority (based on an advanced triage system) and do not consider CTAS assignments as these are assigned retrospectively
- Consistent use of a single source of data and/or standardization of data, which can be used for decision making and monitoring performance, as this allows for valid review of trends
 - While Alberta still has multiple data sets, the Province is moving towards a provincial PS data system to
 provide a reliable, comprehensive source of data
- Effective Electronic Patient Care Record (EPCR) systems enable collection of valuable information on the quality of patient care being provided by ambulance services
 - National Health Service (NHS) currently tracks a number of clinical outcome measures including % of cardiac
 arrest patients with return of spontaneous circulation, which is enabled through its EPCR system
- Relationships with privately contracted companies enable accountability through performance-based contracts and independent oversight to monitor performance and compliance – incentivized through contract renewal (Nova Scotia) or financial incentives (Nova Scotia, NHS, U.S.A.)
 - Medavie reports indicators, such as call processing times and overall response times, to oversight body, while further breakdown of indicators is reviewed internally to identify opportunities to improve services

Business Process Improvements

- 1. Enhance relevant performance targets that are reflective of activities associated with CACCs
 - Ensure alignment of metrics to evolving models of care
- 2. Enhance CACC and Ornge OCC performance metrics or scorecards
 - Review reports generated today and cease reporting on areas that are not relevant
- 3. Advance analytic reporting to generate additional insights based on current data
 - Consider updating or investing in technology infrastructure and analytics tools to enhance reporting
- 4. Improve the Quality Assurance framework/program to drive performance and quality in the service model

Leadership and Structures

Strengths

- Some support by leadership to front line staff in the form of training and mentorship
- For the smaller centres, inter-professional relationships are fostered between staff and management
- Each centre is familiar with the practices of municipality and service providers and can tailor local services to meet the needs of communities
- Ornge and CACCs regularly connect to collaborate on operations

Quantitative Findings

- 22 CACCs, 11 run by Ministry and 11 are non-Ministry CACCs
- Ornge OCC and OCC back-up location
- Municipalities currently fund 50% of ambulance services but not dispatch centres

Challenges

- With each of the interviews and focus groups conducted, **all participants** indicated that there are too many CACCs in the province and there is opportunity to consolidate, while maintaining quality service
- Varied standardization across the province with regards to practice and technology different interpretations
 of policies due to large number of CACCs
 - This variation contributes to the inefficiencies when operating EHS systems
- With the current number of CACCs, it can be difficult to provide robust oversight and governance to introduce new programs or initiatives
- Some stakeholders reported the challenge with gaining full transparency provincially in understanding operations and expenditures by CACC, with the different accountability structures
- Within EHSB, it is reported that variation exists between the span of control at the supervisor or manager level, which impacts the ability to provide consistent oversight and performance management
- As some of the CACCs provide dispatch services other than PS (e.g., fire, police), a proportion of stakeholders report this can restrict access to ambulance service, as there are competing priorities
- Currently no established standard for management processes and operational functions, which could be achieved through accreditation

Leadership and Structures cont'd

Jurisdictional Practices

- Consolidation to reduce the overall number of land dispatch centres in various jurisdictions enabling achievement of efficiencies and ease of standardizing practices across centres
 - NHS moved from 31 dispatch centres in 2006 to 14 in 2016, in order to improve strategic capacity and achieve efficiency gains
 - Success of this initiative was largely due to advanced technology, which allowed dispatch centres to manage calls quicker and more efficiently, supported communication between dispatch centres, and enabled seamless transition of calls between dispatch centres; Challenges included concerns from community members that the dispatch centres were not in close proximity to them and fear of dispatch officers lacking local context knowledge
 - Similarly, Alberta attempted to consolidate the PS dispatch system, which was put on hold in March 2010
 - Reported benefits included the standardization of dispatch processes and consistent technology use across the province; Consolidating the PS dispatch system posed funding challenges for centres that previous dispatched multiple services (i.e., PS and fire), as these centres no longer received funding for their PS services
- Contracting private companies to provide ambulance dispatch services, using contracts to ensure accountability for meeting performance standards e.g., Medavie in Canada
 - The trend for government, including other areas within the healthcare system, is to continue its evolution towards a stewardship model and empower other entities for direct service delivery, while maintaining 'arms-length' oversight; this model enables accountability for service provision and achievement of metrics to be placed on the service provider vs. the oversight body
- Achievement of accreditation by a national/international organization provides assurance that provider is aligned with recognized standards of excellence
- Centralized dispatch of air and land ambulance to enable transparency between providers and more efficient provision of transportation services e.g., Manitoba, British Columbia, Nova Scotia

Business Process Improvements

- 1. Investigate opportunities to pursue accreditation for emergency dispatch communication across all CACCs and OCC from a recognized, international organization
- 2. Review current accountability frameworks and enhance service and performance expectations and monitoring

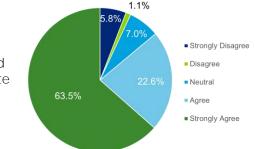
Infrastructure, Technology Requirements

Strengths

- Over the years, EHSB has invested in gradually improving technology to support communications
- MPDS system used in Niagara and Toronto is known to be reliable and accurate due to real time data and allocation of paramedics
- It is reported that a number of CACCs may have the physical infrastructure to take on additional capacity
- A data sharing agreement and technology solution enables information from CritiCall to be pushed to Ornge to help populate the CAD and inform patient transfers

Quantitative Findings

Survey: The current dispatch triage tool could be improved to contribute to an enhanced patient experience during a 911 call



Challenges

- Delays in obtaining important patient information due to incompatibility of patient care record from ambulance to hospitals
- The majority of survey participants who provided additional comments reported that the current triage system is "risk averse" and there are scenarios where the priority response does not fully align with the triage assessment
 - It is perceived that there are too many calls assigned a Priority Code 4
- It is reported variability exists across the province regarding the process to re-route public-safety answering point (PSAP) calls when dispatch does not field calls: mix of automated re-routing through telecommunications company vs. manual calling by PSAP staff. This poses a key risk to timeliness of access to service
- Each CACC has a designated back-up centre, however almost all areas use manual processes (phone, radio, and paper) to manage calls when systems go down, which poses risks during downtime situations
- All CACCs currently use the same CAD platform but not the same instance of it, which impacts the efficiencies where collaboration across CACCs is needed or in shifting to new service models in the future. Further, **Ornge's** CAD currently does not interface with the CACC CAD preventing integration

Infrastructure, Technology Requirements cont'd

Jurisdictional Practices

- Consistent advanced triage functionality across all dispatch centres enabling standardization of data collected, ease of integration across dispatch centres and comprehensive triage of emergency calls
 - MPDS is used in BC and Manitoba, enabling a standard of care protocol for medical emergency triage as well as pre-arrival instructions to patients/callers
 - MedStar in Forth Worth, Texas, and the Regional Emergency Medical Services Authority (REMSA) in Reno, Nevada are both accredited through the International Academy of Emergency Dispatch (IAED) and use MPDS as their triage tool
- CAD to CAD compatibility enabling communication between dispatch centres and across the continuum of patient care (Dispatch to ambulance to hospital)
 - Integrated CAD systems enable dispatchers to see location of ambulances, send information to mobile data terminals, and ensure that time stamps are accurately captured
- Seamless transfer of calls
 - Telecommunications company in NHS automatically re-routes calls where dispatch is unable to receive calls enabling timely response to emergency calls
 - In BC, peak demand rollover is seamless unanswered calls go seamlessly to the backup centre

Business Process Improvements

- 1. Procure a standardized electronic triage system across all CACCs, in alignment with 2017-18 and 2018-19 system improvements
 - Procure a triage system with an advanced algorithm to assign priority status that reflects patient needs
- 2. Implement technology to allow seamless transition of calls to mitigate system or switch failure across all CACCs and **Ornge's** OCC
- 3. Implement advanced dispatch technology functionality that aligns with the future model of services
 - Consider standardizing CAD instance across CACCs to enable effective sharing of information
 - Implement a system to enable two-way communication with PS mobile data terminal and CAD system, thus
 enabling a combined rich data set of EPCR and CAD data, in alignment with proposed 2017 system
 improvements

People and Roles

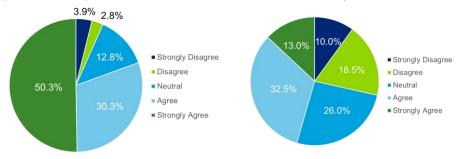
Strengths

- Regional centres foster strong interpersonal support amongst peers
- While not consistent across all CACCs, it was reported that clear lines of communication exist between field offices and head office, though there is ongoing work required to strengthen these
- Interviews indicate there are knowledgeable front-line staff fielding and managing calls from the public

Quantitative Findings

Survey: There are opportunities to improve the pre-arrival instructions given to patients prior to the paramedics' arrival.

Survey: I believe that the current way dispatch staff are utilized supports timely ambulance responses.



• 34% of survey respondents strongly agree/agree that staff receive enough training to effectively perform their jobs

Challenges

- As managers are not staffed 24/7 across all CACCs, this can be challenging to sustain performance management-related activities, as it is reported that staff may not see their managers for an extended timespan
- Overall, forum for all CACC staff to connect does not exist and currently regularly scheduled staff meetings within CACCs does not occur
- It is perceived that there is variation among CACCs with regards to general HR practices, e.g., hiring, management of staff, operations
- There is variability in capturing HR-related data across CACCs including sick time, overtime, and attrition

People and Roles cont'd

Jurisdictional Practices

- Dedicated resources for 911 dispatch vs inter-facility transport to provide clearer roles and reduce competition for resources – e.g., British Columbia
- Cross-training staff on other roles to provide alternate resources and cost efficiencies e.g., Manitoba
- Providing access to a supervisor/management 24/7 to provide support to front line staff and ensure consistent local operations – e.g., Manitoba
- Focus on creating a workplace of excellence including providing effective education to ensure quality patient care through ongoing skills and knowledge evaluation e.g., British Columbia

Business Process Improvements

- 1. Focus on enhancing an engaged culture within the CACCs
 - E.g., establish annual in-person meetings, webinars, social media sites, SharePoint sites, and/or blogs to support regular engagement, encourage connecting with other regions and sharing lessons learned, formal certification of ACOs through accreditation process, increased support for Supervisors and Managers to improve management skills and abilities
- 2. Explore models that can support management functions 24/7
 - Consider cross-coverage models across CACCs, and unionized vs. non-unionized environments
- 3. Examine current education practices to determine changes that may be required to increase adoption of training (e.g., alternate approaches, peer-based learning models)
- 4. Advance HR management practices
 - Consider implementing an electronic scheduling system to better track staff utilization and inform predictive scheduling
 - Stronger focus on development of leadership, succession and retention management using informal/formal methods
 - Conduct a review of staff utilization particularly attrition, sick time, and overtime to better understand drivers; this may include collection of quality data to conduct analytics

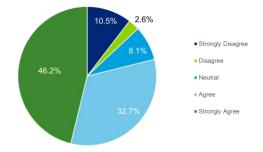
Health Care System Integration Points

Strengths

- Tiered response in place with police, fire, and ambulance to ensure that appropriate resources are dispatched for every call
- CritiCall and the CACCs have a well-established process to communicate and coordinate life and limb transfers
- Strong communication with Ornge, particularly for inter-facility transfers

Quantitative Findings

Survey: I believe there are opportunities to improve the integration between the ambulance dispatch centres and the broader healthcare system.



Challenges

- Currently minimal integration of data between ED, Ambulance, CACCs, and LHINs majority of survey respondents identified the need for open communication channels between Dispatch Services, paramedics, CACCs and the MOHLTC
- For transport other than life or limb, hospitals do not consistently know who to contact for transport (i.e., air vs. land)
- Lack of integration with parallel call systems such as Telehealth Ontario and 811
- While CritiCall is able to push personal health information to Ornge to populate their Patient Transfer Authorization Centre (PTAC) and CAD, CACCs do not have access to view this information, which increases risk and could impact timeliness of communication
 - It is noted that preliminary integration efforts are underway to integrate Ornge's dispatch system with the CACCs; to date, a technical specifications document has been drafted for this work
- As there is variability among PS regarding their allocation plans, the CACCs must be cognizant of constraints when allocating PS to the airport for transport handoff with Ornge

Health Care System Integration Points cont'd

Jurisdictional Practices

- Emergency Communication Nurse System (ECNS) implemented with MPDS provides an algorithm to triage lowacuity calls and connect them to appropriate community resources or provide self-care instructions
 - This is currently in place Fort Worth, Texas, and Reno, Nevada, as well as in the UK and Australia
 - As there is a shared CAD, the model enables seamless transition to 9-1-1 dispatch to maintain the public safety, rather than repeating information and starting from the beginning
- Multiple centres in the USA and UK have air and land ambulance services dispatched from the same facility enabling a more coordinated dispatch for transports requiring both land air services
- Within British Columbia, Emergency Health Services is responsible for the Ambulance Service as well as the Patient Transfer Network, which is a 24/7 services that collaborates with health care providers for an integrated approach to safe, efficient transfer of acute and critically ill patients
- Defining the vision for emergency response will support the shaping of the service model for the future
 - E.g., Perspectives on public safety as a priority vs. promoting an integrated health system

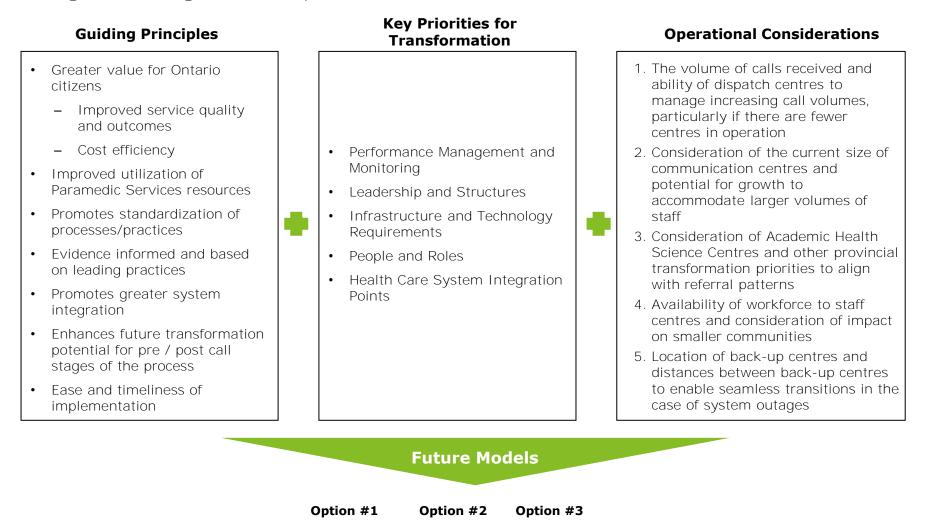
Business Process Improvements

- 1. In alignment with *Patients First* and EESO, establish a future vision of pre-hospital care to inform the roles and responsibilities of CACCs
 - Consider other referral options for the public for low acuity calls
- 2. Explore model options to strengthen the communication and coordination of critical care transport
- 3. Identify expanded support or guidance that ACOs can provide to patients and families to improve outcomes, as well as the patient experience

Future State Model Options

Development of Future State Models

The model framework and guiding principles inform the proposed future state models, and a set of operational criteria was developed to support discussions on siting and sizing of the dispatch centres



Descriptions of Model Options

Overview of potential future state models for ambulance communications

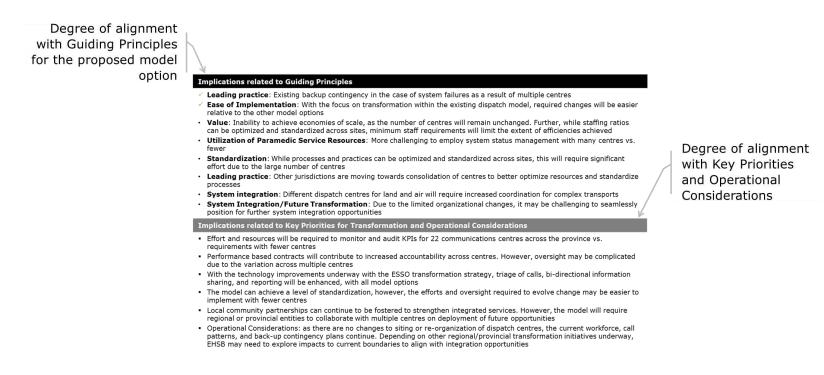
- As described earlier in the report, the implementation activities for the Key Priorities for Transformation are required in all model options
- Regardless of the number of CACCs that will be in operation, the future model will be **one, holistic interconnected system** that fosters coordinated collaboration with stakeholders across the emergency health services ecosystem (e.g., **one number to call for help, regardless of the severity of the citizen's need)**
- In selecting the future state model for ambulance communications, consideration must be given to the **future vision** and **the capabilities required** to support this vision

Option 1: Existing Dispatch Model Transformation	 Maintenance of 22 land ambulance dispatch centres across Ontario Current CACC boundaries and relationships with existing paramedic services Current relationships with air services provider remain in place Single or hybrid operational model – i.e. direct operation by Ministry, transfer-payment agency, or contractor, or a combination
Option 2: Regional Dispatch Model	 Regional centres for ambulance dispatch that may align with relevant patient flow patterns Options to inform reduced number of centres include: CACCs that align with three existing Field Offices Alignment with Tertiary Centres in Ontario Consolidation to align with distribution of call volumes Current relationships with air services provider remains in place Single or hybrid operational model - i.e. direct operation by Ministry, transfer-payment agency, or contractor, or a combination
Option 3: Centralized Dispatch Model	 Centralized dispatch services for land and air, with back-up site redundancies built-in Single operational model – i.e., direct operation by Ministry, transfer-payment agency, or contractor

Evaluating Future Model Options

The following pages highlight implications of the three proposed model options relative to the guiding principles, key priorities, and operational considerations

- The visual below illustrates the template used to describe the assessment of the future model options as presented on the following pages
 - Each model option was assessed based on alignment with guiding principles, key priorities, operational considerations and the future vision for emergency health services
 - Although model options may align with specific principles or priorities, the degree of alignment will
 vary with the number of communication centres



Option 1: Transformation of Existing Dispatch Model Model characteristics relative to the guiding principles, key priorities for transformation, and operational considerations

Implications related to Guiding Principles

- Leading practice: Existing backup contingency in the case of system failures as a result of multiple centres
- Ease of Implementation: With the focus on transformation within the existing dispatch model, required changes will be easier relative to the other model options
- Value: Inability to achieve economies of scale, as the number of centres will remain unchanged. Further, while staffing ratios can be optimized and standardized across sites, minimum staff requirements will limit the extent of efficiencies achieved
- Utilization of Paramedic Service Resources: More challenging to employ system status management with many centres vs. fewer
- **Standardization**: While processes and practices can be optimized and standardized across sites, this will require significant effort due to the large number of centres
- Leading practice: Other jurisdictions are moving towards consolidation of centres to better optimize resources and standardize processes
- System integration: Different dispatch centres for land and air will require increased coordination for complex transports
- System Integration/Future Transformation: Due to the limited organizational changes, it may be challenging to seamlessly position for further system integration opportunities

Implications related to Key Priorities for Transformation and Operational Considerations

- Effort and resources will be required to monitor and audit KPIs for 22 communications centres across the province vs. requirements with fewer centres
- Performance based contracts will contribute to increased accountability across centres. However, oversight may be complicated due to the variation across multiple centres
- With the technology improvements underway and with the ESSO transformation strategy, triage of calls, bi-directional information sharing, and reporting will be enhanced, with all model options
- The model can achieve a level of standardization, however, the efforts and oversight required to evolve change may be easier to implement with fewer centres
- Local community partnerships can continue to be fostered to strengthen integrated services. However, the model will require regional or provincial entities to collaborate with multiple centres on deployment of future opportunities
- Operational Considerations: as there are no changes to siting or re-organization of dispatch centres, the current workforce, call patterns, and back-up contingency plans continue. Depending on other regional/provincial transformation initiatives underway, EHSB may need to explore impacts to current boundaries to align with integration opportunities

Option 2: Regional Dispatch Model

Model characteristics relative to the guiding principles, key priorities for transformation, and operational considerations

Implications related to Guiding Principles

- Value: Trend towards achieving great economies of scale with fewer centres; efficiencies gained through consolidation of sites as minimum staffing levels are no longer required due to critical mass being achieved
- ✓ Utilization of Paramedic Service Resources: Easier to employ system status management with fewer centres
- ✓ Leading practice: Existing backup contingency in the case of system failures as a result of multiple centres
- ✓ Leading practice: Aligns with the movement in other jurisdiction around consolidation
- System Integration/Future Transformation: With fewer regional centres, the Branch is better positioned for further system integration opportunities
- System integration: Different dispatch centres for land and air will require increased coordination for complex transports
- Ease of implementation: Changes to organizational structures and staffing will require robust planning and efforts

Implications related to Key Priorities for Transformation and Operational Considerations

- Consolidating communications centres will increase the likelihood of success of standardized performance monitoring due to the reduced number of centres requiring monitoring
- Performance based contracts will contribute to increased accountability across centres. However, oversight will be less
 complicated with fewer centres
- With the technology improvements underway and with the ESSO transformation strategy, triage of calls, bi-directional information sharing, and reporting will be enhanced, with all model options
- Consolidation of centres will support a structure to better standardize policies and procedures, as well as reinforce HR management practices
- Although knowledge of local communities may not be as comprehensive due to consolidation of centres, there is still opportunity to tailor centres to meet the needs of the geographical region. The model will require regional or provincial entities to collaborate with multiple centres on deployment of future opportunities, albeit fewer centres
- Operational Considerations: The EHSB will need to conduct an assessment on the size and physical capacity of the current centres, to support discussions on siting options. The consolidation to fewer centres will have an impact to the workforce in smaller communities, though potential technology supports could allow for virtual workplaces in the future

Option 3: Centralized Dispatch Model

Model characteristics relative to the guiding principles, key priorities for transformation, and operational considerations

Implications related to Guiding Principles

- Value: Model enables achievement of great economies of scale with efficiencies gained through consolidation of sites as minimum staffing levels are no longer required due to critical mass being achieved
- Utilization of Paramedic Service Resources: System status management can be implemented in a seamless way with a centralized model
- ✓ Leading practice: Aligns with the movement in other jurisdiction around consolidation
- System Integration/Future Transformation: Implementation of future system integration opportunities may be easier with a common operational leadership to inform and implement transformation changes more broadly
- ✓ System integration: Consolidated land and air dispatch will support enhanced coordination for complex transports
- Leading practice: Challenge to ensure sufficient backup contingency with potential system failures and the ability to manage overflow
- Ease of implementation: Changes to organizational structures and staffing will require robust planning and efforts

Implications related to Key Priorities for Transformation and Operational Considerations

- Consolidating air and land communications centres will increase the likelihood of success of standardized performance monitoring due to the reduced number of centres requiring monitoring. Furthermore, efficiencies may be achieved through consolidated decision support for air and land dispatch.
- Performance based contracts will contribute to increased accountability across centres. However, oversight can be maintained consistently with a centralized model
- With the technology improvements underway and with the ESSO transformation strategy, triage of calls, bi-directional information sharing, and reporting will be enhanced, with all model options
- Consolidation of centres will provide an opportunity to revisit and standardize policies and procedures across all centres and enable a consistent, streamlined approach for air and land dispatch. HR management practices can be reinforced in a standardized way, which can build capacity in the leaders
- Knowledge of local communities to meet the needs of geographical regions may not be as comprehensive due to consolidation of centres
- Consolidation of air and land communications centres aligns with the future vision of integration with other services and the broader health system. A centralized approach may accelerate collaboration opportunities in the future with other provincial or regional partners
- Operational Considerations: The EHSB will need to conduct an assessment on the size and physical capacity of the current centres, to support discussions on siting options. The consolidation to fewer centres will have an impact to the workforce in smaller communities, though potential technology supports could allow for virtual workplaces in the future

A Future Landscape for Land Ambulance Communications Provincial initiatives, including *Patients First* and EESO, will evolve the health system, allowing for new service models for communications

Innovation in Care Delivery Models

Future models will transform care delivery to participate in community prevention interventions such as home visits and wellness clinics, in alignment with the objectives of *Patients First*. The future state roadmap of ambulance response is for communications centres to play a role in triaging callers and initiating an integrated response including connecting them with **existing community services** that are **closer to home**, such as Telehealth and Health Links, thereby minimizing the use of acute care resources.

Disruptive Enabling Technologies

Evolving technology will play a role in ambulance communications through increased automation of communications, use of artificial intelligence and machine learning, advanced capabilities through telemedicine technology, and virtualized technology to transform service delivery and enable innovative workforce models. The planned 2017-18 and 2018-19 system improvements will focus on technology enabled bi-directional data sharing between dispatchers and paramedics and a comprehensive pre-hospital patient



Insights to Manage Performance and Inform Progressive Transformation

Use of analytics will help inform decision-making to improve services offered, patient outcomes and achieve an end-to-end perspective on the patient journey through prehospital care. As part of EESO, an accountability structure will be established for emergency health services and benchmarks to measure system performance will be identified. The use of analytics will inform predictive modeling and enable faster and improved access to care for patient and better resource planning.



Summary of Survey, Focus Group, and Interview Participants

Stakeholder engagement informed our understanding of the current state of emergency communications in Ontario

Survey	 558 survey responses were received from the following organizations: MOHLTC LHIN CCSO Criticall Municipal Organizations Ornge Paramedic Services CACC / ACC / OCC / ACS
Focus Groups	 4 focus groups were conducted as follows: OAPC ED LHIN Leads Ornge EHSB SMT
Interviews	 7 interviews were conducted, with individuals representing the following organizations: Rama First Nation Paramedic Services MOHLTC, Direct Services Division James Bay Ambulance Services MOHLTC, Health Services I&IT Cluster Association of Municipalities Ontario Criticall MOHLTC, Emergency Health Services Branch Leadership

Performance and HR Data Methodology

The following methodology was used to analyze performance and HR data for CACCs as demonstrated on the following slides

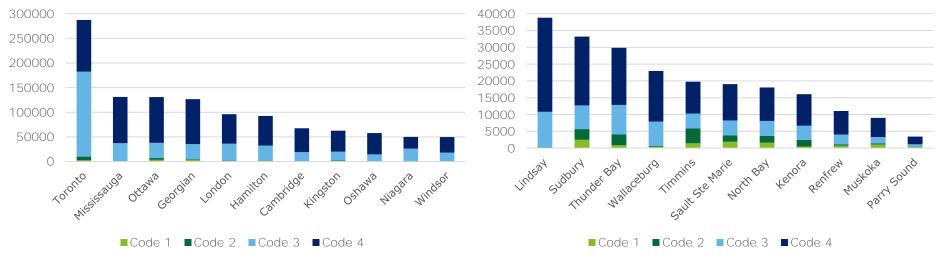
Call Volumes Received	 Data pulled from ARIS Report by Ministry Includes Code 1-4 calls Date range: Jan 1, 2014 – Sept 30, 2016
90 th Percentile Dispatch Times	 Data pulled from ARIS Report by Ministry Includes Code 4 calls Calls with T0-T2 > 1800 seconds excluded Calls share, double dispatch and unit transfer calls excluded
Actual Spend per CACC	 Data provided by Ministry for FY 14/15 and FY 15/16 Includes CACC costs only, not costs associated with Paramedic Services
Sick Days	 Number of sick days provided by Ministry for Ministry-run CACCs and by individual CACCs for non-Ministry centres Sick-time for part time employees was not included Where sick-time was provided in hours, assumption was 8-hour shifts to convert to days Date range: Apr 1, 2015 - Mar 31, 2016
Span of Control	 Employee data provided by Ministry for Ministry-run CACCs and by individual CACCs for non-Ministry centres Date range: Apr 1, 2015 – Mar 31, 2016 Number of employees determined based on data sent over Span of control calculation as follows: (# of full-time + part-time employees) / # of Operations Managers
Call Volumes/ Dispatcher	 Calculation as follows: Call volumes received / (# of full-time employees + sum of FTE of part-time employees)

Performance Data Analysis – Land Ambulance

Volumes of Calls Received by Code (2016)

The majority of calls received were categorized as Code 4, with the exception of Toronto Niagara, and Timmins CACCs

CACCs with Call Volumes <40,000

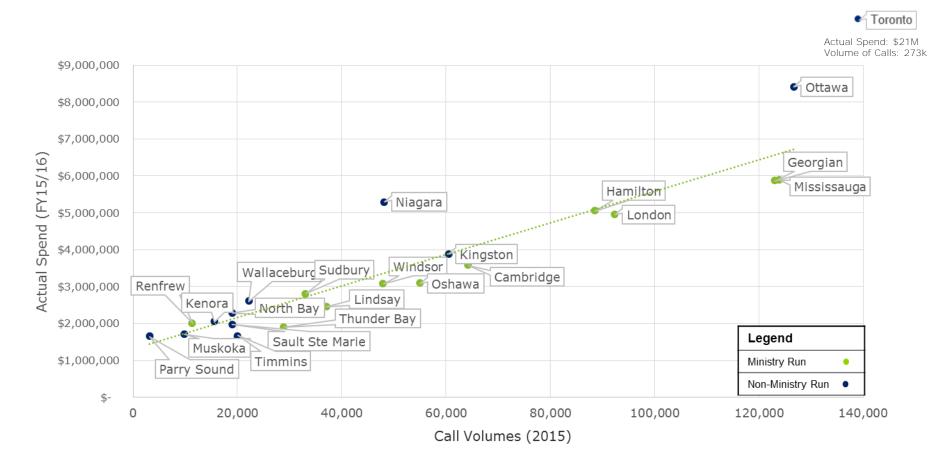


CACCs with Call Volumes 40,000-300,000

- The graphics illustrate the proportion of priority Code calls by CACC
- The majority of sites categorized the highest proportion of calls as Code 4 calls
- Toronto, Niagara, and Timmins were the only sites that categorized <50% of calls as Code 4
- Timmins had the greatest proportion of Code 2 calls (20% for 2016)

Source: ARIS Reports *Data from January-September 2016 was used to project the total volume for the year

Actual Spend Per CACC and Corresponding Call Volumes* Spend varied from \$1.7M to \$21M relative to the number of calls received



• Toronto CACC had the highest actual spend and highest call volumes in FY15/16, while Parry Sound had the lowest actual spend and call volume

Source: ARIS Reports

HR Data Analysis – Land Ambulance

HR Data Limitations

Analysis of HR data is limited by availability and quality of information across CACCs

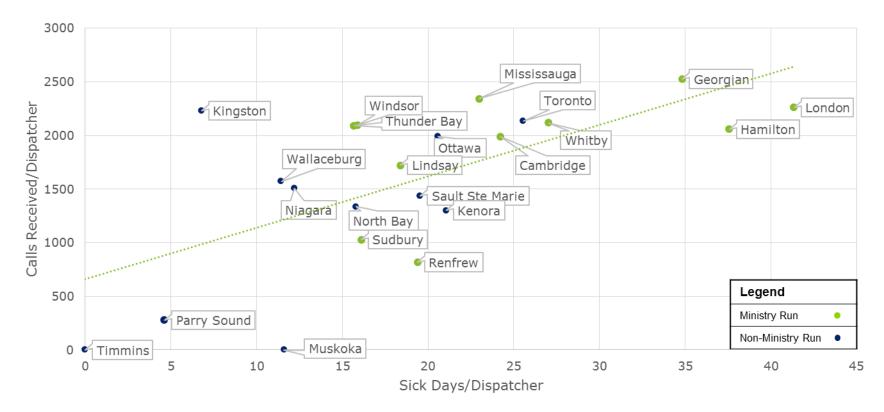
- As part of the current state analysis, our team reviewed HR-related data to gain insights into the operational practices and outcomes to determine impacts to trends, such as attrition, sick time, and overtime use.
- While the data request distributed to the CACCs included standardized HR data points, a number of issues emerged in the process to inform comparisons across regions.

Limited standardization	Variation in methodology to capture data, including role categories, which poses challenges in comparing span of control and responsibilities
Data quality	 Limited availability to extract typical HR data easily (e.g., number of FTEs by role, overtime usage, turnover by employee vs. at an aggregate level, etc.), thus manual calculations required to generate data Unable to extract overtime data for MOH-operated CACCs

With the limitations to the available HR data, only targeted analyses can be conducted and comparisons of CACC performance should be considered directional in nature

Call Volumes and Corresponding Average Sick Days per Dispatcher by CACC*

Trend shows a correlation between increased sick time volume of calls per dispatcher

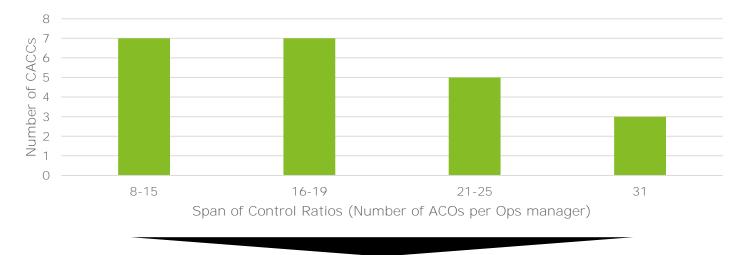


Note that on-call FTE information was not available for the Timmins and Muskoka CACCs, and number of sick days was not available for the Timmins CACC

Span of Control in CACCs

Ratios of Operational Managers to Dispatch Officers is variable across CACCs

- The number of Operations Managers in CACCs ranges from 1-6, and is proportional to call volumes and number of employees
- Regardless of CACC size, at least one Operations Manager is required on staff
- Span of control for Operations Managers ranged from a ratio of 1 Operations Manager: 13 ACOs to 1 Operations Manager: 31 ACOs, averaging ~19 ACOs per Operations Manager



Further investigation is required into an optimal ratio for span of control, however opportunities for efficiencies of scale with regards to staffing exist in larger CACCs

Jurisdictional Review

Summary of Review of Jurisdictional Practices

Key highlights from the review of ambulance communication models in different regions provide opportunities to consider for the future state

- All jurisdictions reviewed had a **single governance entity** for oversight of ambulance dispatch
 - Current dispatch models establish **government as the overall oversight body** with only municipalities, hospitals, or private companies operating as direct service providers
 - For jurisdictions with contracted out services (i.e., USA and Nova Scotia), performance based contracts with penalties and incentives are used to ensure accountability
 - Regular **review** of performance and a combination of **process and outcome measures** allow for evidence-based decision making and evaluation of service providers
- Use of a standardized triage system across all dispatch centres is common in most jurisdictions
- Jurisdictions with **CAD to CAD compatibility** have 'borderless' dispatch allowing dispatch of resources from neighbouring communities and seamless back-up in the event of a system failure
 - Advanced telecommunication systems automatically re-route calls when dispatch centres are not able to receive calls
- Many jurisdictions have moved to an **expanded role of ambulance dispatch centres** where low acuity calls are referred to existing community resources
 - Built-in referral criteria during triage for low acuity calls can optimize use of existing healthcare resources
- Clear criteria and roles for use of air ambulance and inter-facility transfers to streamline
 processes and ensure clear accountability in emergency health services system
 - Use of **integrated communication systems between service providers** to enable prompt and clear sharing of relevant patient information and performance data
- Advanced management reporting systems enable centralized capture of employee data and shift reports, with real-time updates to managers on performance at multiple levels

Jurisdictional Overview - Nova Scotia

	Highlights
Overview	 Provision of emergency services governed by Nova Scotia EHS through a privately owned company – Emergency Medical Care (EMC) One Medical Communications Centre (MCC) dispatches 160 ambulances from 60 ambulance bases
Performance Management and Monitoring	 EMC is obligated by a performance-based contract with the province Performance targets include response times and qualifications for paramedics
Leadership and Structures	 The MCC, land ambulances, and air medical transport operation are all operated by EMC
Infrastructure, Technology Requirements	 Standardized communication through Computer Aided Dispatch (CAD) with mapping capability and automatic vehicle location (AVL) through GPS Mobile terminals in trucks are able to communicate with CADs through specialized software
People and Roles	All EHS Paramedics and dispatchers are employed by EMC and are unionized
Health Care System Integration Points	 Telecare – the government now contracts EMC to manage a standardized phone number where registered nurses provide advice to callers for their non-emergency scenarios While most RNs work out of their homes, EMC provides space for a contact centre that can house up to 5 nurses at any time

Jurisdictional Overview - British Columbia

	Highlights
Overview	 British Columbia Ambulance Service (BCAS) is the sole ambulance service provider and is managed by BC Emergency Health Services Three dispatch centres in operation (Vancouver, Kamloops, and Vancouver Island), which dispatch both land and air ambulance In total, the three dispatch operations centres receive ~1900 requests for emergency response per day
Performance Management and Monitoring	 Measures response times according to dispatch priority with a goal of achieving 9 minutes or less 75% of the time for "highest acuity" patients and 15 minutes or less 75% of the time for medium acuity
Leadership and Structures	 Local presence of front line leadership to ensure dispatchers have immediate access to on site supervisors for assistance
Infrastructure, Technology Requirements	 MPDS in place to triage calls at all BC dispatch centres Standardized CAD technology connects all dispatch centres, while mobile CAD technology connects ambulances with dispatch centres GPS/AVL in place in all ambulances
Health Care System Integration Points	 Dispatch Operations Centre operates the provincial Patient Transfer Coordination Centre (PTCC) which is the Central coordination hub for all inter-facility transfers across the province Coordinates air and ground critical care transports primarily within BC, but will coordinate for international transfers if needed

Jurisdictional Overview - Alberta

	Highlights
Overview	 AHS is responsible for PS services across the province Three dispatch centres - 2 operated by AHS and one by the City of Calgary Three satellite centres - 1 operated by AHS, one by City of Red Deer, and one by City of Lethbridge
Performance Management and Monitoring	 Currently two different provincial PS data sets – challenges in using this data for comprehensive performance, quality and safety management PS dispatch software in place to measure response times for a specific period of time, service, or geographical area
Leadership and Structures	 While AHS is responsible for PS services in Alberta, there have been challenges with consolidation of dispatch, leading to a mixed governance structure where some dispatch centres are operated by AHS and others are under contract
Infrastructure, Technology Requirements	 All dispatch centres currently use the same CAD platform but not the same instance of it, resulting in challenges with communication between centres Majority of ambulances have on-board computers that communicate with the dispatch centre's CAD system, however there are still areas of the province that do not have this technology in place
People and Roles	 Transition of PS system to AHS has resulted in more standardized staff training, however challenges included a loss of local community knowledge and challenges for staff adjusting to a new organizational culture
Health Care System Integration Points	 Community Health and Pre-Hospital Support Program (CHAPS) allows Paramedics to refer patients to Home Care and other community services to reduce PS transport to emergency departments

Jurisdictional Overview - Manitoba

	Highlights
Overview	 Regional Health Authorities (RHAs) are responsible for land ambulance service delivery – services are delivered directly by RHA or through contracts with affiliate agencies
	 Two dispatch centres with different models – one solely for PS dispatch in northern and rural Manitoba and inter-facility transfers (Manitoba Medical Transport Coordination Centre - MTCC), the other for fire and PS calls originating in Winnipeg (Winnipeg Fire Paramedics Service - WFPS)
Performance Management and Monitoring	 Current structure does not look at patient outcomes No accountability or performance requirements in place by oversight body, no apparent reporting in place
Leadership and Structures	 Fire and ambulance service integration was supported by the City of Winnipeg and the Winnipeg Regional Health Authority (WRHA) Regional management of ambulance service dispatch
Infrastructure, Technology Requirements	 AVL used to track location of all fire and PS vehicles, and the system dispatched to Electronic Patient Care Reports (EPCR) to all PS and supervisor vehicles CAD system not consistent between the two communication centres
People and Roles	 Fire and PS dispatchers work under different collective agreements with a formal work sharing agreement
Health Care System	 MTCC is the dedicated dispatch centre for PS services as well as all inter-facility ambulance transfers for the province
Integration Points	 WFPS is responsible for dispatching all emergency and non-emergency calls for service for PS and fire originating in Winnipeg

Jurisdictional Overview - United States of America (select cities)

	Highlights
Overview	 Ambulance dispatch in the United States is variable with some cities using "low-tech" approaches to dispatch, while others have very advanced technology in place Systems range from publicly operated PS structures to private/for profit PS, depending on the needs of the population
Performance Management and Monitoring	 Both MedStar and RAA have set performance standards of responding to the highest priority calls within 9 minutes, 90 percent of the time Recommendations by the American Ambulance Association include having performance based contracts in place that measure clinical excellence, response-time reliability, economic efficiency, and customer satisfaction
Leadership and Structures	 American Ambulance Association recommends arms length oversight for contracted emergency services to monitor performance against other high- performance systems, and ensuring established service requirements are met
Infrastructure, Technology Requirements	 MedStar and RAA both have System Status Management (SSM) tools in place, which use predictive modeling to determine the best placement of available vehicles All systems utilize MPDS for ambulance dispatch triage levels – REMSA and RAA both use ProQA, which is the software version of MPDS
People and Roles	 REMSA has monthly continuing education in place as well as online training modules to educate staff
Health System Integration Points	 REMSA and MedStar: Low or no acuity 911 calls are transferred to a specially trained RN in the communications centre, who evaluates needs and connects patients to the best/most appropriate resource REMSA: Integrated land and air ambulance dispatch centres – simultaneous dispatch while providing care instructions to callers

Jurisdictional Overview – United Kingdom

	Highlights
Overview	 NHS provides funding to Clinical Commissioning Groups, which come together to purchase ambulance services through NHS Trusts 13 ambulance services trusts throughout the UK, operated by different organizations
Performance Management and Monitoring	 Performance of every NHS ambulance provider is measure and benchmarked by the government Numerous benchmarked targets including time to answer calls, time until treatment by an ambulance, call abandonment rate, as well as outcome measures for stroke and cardiac arrest
Leadership and Structures	 Department of Health governs legislation on Ambulance Trusts Clinical Commissioning Groups funded by NHS to purchase ambulance services for their regions
Infrastructure, Technology Requirements	 Standardized communication through Computer Aided Dispatch (CAD), Mobile Data Terminals AMPDS in place for identifying dispatch priority as well as NHS Pathways in some dispatch centres 999 calls are passed to British Telecom and then to designated emergency services – calls will be passed on to another ambulance dispatch centre if the initial centre does not respond PSAP is operated by British Telecom
People and Roles	 Volunteer community first responders (CFRs) in place – members of the public who have received training to answer ambulance 999 calls and respond immediately within their local area, during their own time

Jurisdictional Overview - Medavie

	Highlights
Overview	 Medavie is a health company, consisting of Medavie Health Services and Medavie Blue Cross Medavie Health Services manages a number of subsidiary companies in emergency medical services (EMS), mobile integrated health, telehealth, medical communications, public safety delivery and clinical training Medavie Health Services currently provides EMS services in six Canadian provinces and in Massachusetts in a number of different services models including end-to-end services in Nova Scotia; land and air ambulance services in New Brunswick; 911 call-taking services, pre-hospital emergency care and non-emergency transfers in Prince Edward Island; community paramedicine and call processing in Saskatoon; and ground ambulance services in a number of areas across Canada
Performance Management and Monitoring	 In Nova Scotia, Medavie operates under a performance based contract with annual performance reviews – while high level reporting is provided to the government (e.g., overall response times), this data is broken down and reviewed internally to identify limitations and mitigation strategies
Infrastructure, Technology Requirements	 Dispatch centres in Nova Scotia, New Brunswick and Saskatoon use MPDS to triage calls and have all achieved accreditation through the International Academies of Emergency Dispatch Communication centres can coordinate sending patient information to receiving hospital facilities, often through fax; currently exploring virtual whiteboard technology for better integration of services with hospitals
People and Roles	 Contracts often have an Accreditation requirement to drive quality and safety in the system – focus of Accreditation is on ensuring that appropriate advice is provided to callers and sufficient information is obtained to dispatch resources

Jurisdictional Overview - Medavie

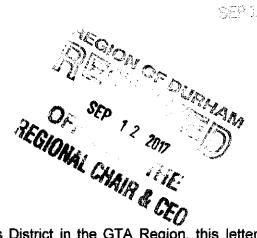
	Highlights
People and Roles cont'd	 Medavie has a number of subsidiaries that have achieved accreditation including Prairie EMS – the first private Ambulance operator in Alberta to receive Qmentum accreditation EHS in Nova Scotia – accredited by the Commission on Accreditation of Ambulance Services (CAAS), National Academies of Emergency Dispatch (NAED), and Commission on Accreditation of Medical Transport Systems (CAMTS)
Health Care System Integration Points	 Have experience integrating EMS system with 811 in Nova Scotia, which is a provincial health care service offering 24/7 telecare service through a registered nurse (RN) Medical dispatch centres are used as a hub for appropriately triaging and coordinating incoming calls in order to optimize coordination and improve the accessibility and delivery of primary health care It is reported that this has reduced ambulance dispatch volumes by appropriately redirecting low priority calls
Lessons Learned	 Important to identify a vision for service provision (i.e., public safety vs. alignment with health system transformation) and ensure that structure of emergency services aligns with vision Achieving true integration of a system requires uniformity and alignment across service providers; this will contribute to efficiencies in the system and allow for effective allocation of resources



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Durham Region 605 Rossland Road East P.O Box 623 Whitby, ON L1N 6A3



Dear Mr. Roger Anderson,

On behalf of the CBSA, Outports and Postal Operations District in the GTA Region, this letter is to inform you that the CBSA office located at 1200 Airport Blvd., Oshawa, Ontario is proposed for closure on Friday September 29, 2017 at the close of business.

Your CBSA business will now be managed by our Mississauga office located at:

Interport Sufferance Warehouse 5425 Dixie Road, Mississauga, Ontario, L4W 1E6 (905) 625-1081

commercial client

The Mississauga location operates 5 days a week, Monday-Friday, and will provide the same commercial and personal entry processing services as received at 1200 Airport Blvd., Oshawa, ON.

The CBSA is a modern, responsive and dynamic border management organization and the Alternate Service Delivery model is another way that the Government of Canada can increase efficiencies. All government programs are reviewed on a regular cycle to ensure they are effective and efficient and that they respond to the priorities of Canadians.

Accounts Receivable Ledger (ARL) allows commercial clients to make payments through on-line banking options.

Additional information for clients regarding Accounts Receivable Ledger (ARL) is available as follows:

- For information regarding ARL or Frequently Asked Questions: <u>http://www.cbsa-asfc.gc.ca/prog/carm-gcra/faq-eng.html</u>
- To view samples of the Daily Notices (DNs) and Statements of Account (SOAs), clients can visit the CBSA website at <u>http://www.cbsa-asfc.gc.ca/</u>
- To ask a question about ARL, clients can contact the CBSA Assessment and Revenue Management (CARM) Mailbox at <u>cbsa-asfc_carm.gcra@cbsa-asfc.gc.ca</u>
- To request the ARL Reference Manual 2.1, clients can contact the CBSA's Technical Commercial Client Unit (TCCU) by phone at 1-888-957-7224 or by email at <u>tccu-ustcc@cbsa-asfc.gc.ca</u>
- If clients are seeking information about the data structure and transmission specifications for DNs and SOAs, they can consult the Electronic Commerce Client Requirements Document





(ECCRD) for the desired format. ECCRDs are available from the TCCU at tccu-ustcc@cbsaasfc.gc.ca.

We look forward to continuing to do business with you at our Mississauga office.

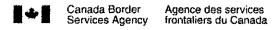
Should you require additional information about the CBSA Release Process, please contact Chris Hedgcock at 416-629-7420

Sincerely,

P.L. Doyey

Laurelle Doxey Director, Outports and Postal Operations District Greater Toronto Area (GTA) Region 4567 Dixie Road Mississauga, Ontario L4W 1S2

Canadä



Durham Region 605 Rossland Road East P.O Box 623 Whitby, ON L1N 6A3



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Your CBSA business will now be managed by our Toronto office located at:

Billy Bishop Toronto City Airport 4 Eireann Quay Toronto, Ontario, M5V 1A1 416-973-2606

M5V 1A1 416-973-2606 The Toronto location operates 16 hours a day, 7 days a week and will provide the same CBSA processing services as received at 1200 Airport Blvd, Oshawa, ON.

The CBSA is a modern, responsive and dynamic border management organization and the Alternate Service Delivery model is another way that the Government of Canada can increase efficiencies. All government programs are reviewed on a regular cycle to ensure they are effective and efficient and that they respond to the priorities of Canadians.

We look forward to continuing to do business with you at our Toronto office.

Should you require additional information or further clarification regarding this matter, please contact Chris Hedgcock at 416-629-7420.

Sincerely,

Ef Dorfer

Laurelle Doxey Director, Outports and Postal Operations District Greater Toronto Area (GTA) Region 4567 Dixie Road Mississauga, Ontario L4W 1S2



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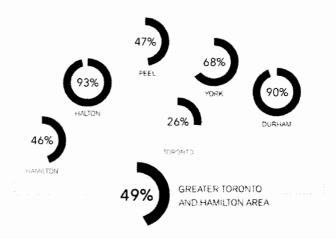
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The Metrolinx Board of Directors met today to receive a number of reports, including updates on PRESTO, Metrolinx's capital projects, the next Regional Transportation Plan (RTP) and fare integration. Board Chair Rob Prichard addressed <u>his correspondence with Minister Del Duca</u> on the proposed Kirby Road and Lawrence East GO stations, which confirms that Metrolinx will not enter into any obligations or agreements unless and until management and the Board are satisfied these stations are justified, and that the Minister will respect and support whatever conclusion the Board reaches.

The Next RTP: Draft Plan for Public Consultation

Chief Planning Officer Leslie Woo presented the staff recommended version of the Draft 2041 RTP. With the new Draft RTP Metrolinx is aiming to go beyond what was in The Big Move to put traveller needs at the core of planning and operations. Specifically, the Draft Plan will propose five strategies that will:

- Complete the current delivery of regional transit projects
- Connect more of the region with frequent rapid transit
- Optimize the transportation system (i.e. integrating fares and services for more seamless travel and addressing first and last mile challenges)



- Better integrate land use and transportation planning to provide better access to transit and encourage walking and cycling
- Prepare for an uncertain future (ie. on-demand mobility; automated vehicles)

A review of the RTP has been underway since 2015 and we are excited to release the updated Draft Plan. The Board provided direction on the start of public consultation on the Draft Plan, which will include public roundtable meetings, events across the region and engagement through metrolinxengage.com between September and December. Leslie will report back to the Board in December with the recommended final version of the RTP.

Metrolinx and its partners are building a better future for transportation for all of us. Today. Tomorrow. Together. See the Draft Plan and stay tuned for the launch of public consultation.

PRESTO Update

PRESTO Executive Vice President Rob Hollis provided an update on the PRESTO retail partnership with Loblaw, which entails Shoppers Drug Mart locations across Toronto selling PRESTO cards and offering PRESTO services. Expansion is currently underway. With more Shoppers locations selling and loading PRESTO cards, it's easier for more people to access transit.

Rob provided updates on PRESTO deployment on the TTC, PRESTO upgrade plans, and TTC rollout plans for 2017. He also spoke to the work underway to ensure Metrolinx is protecting customer privacy.

See the update.

Capital Projects Group Update

Chief Capital Officer Peter M. Zuk delivered a progress update on our Rapid Transit projects and Regional Express Rail program, which includes elements such as hydrogen trains, Union Station, extensions, environmental assessments and SmartTrack stations.

Building the right infrastructure is a critical step in delivering a more integrated transit network for the region.

See the update.

GTHA Fare Integration Update

Chief Planning Officer Leslie Woo provided an update on the work underway to create an integrated fare strategy. A formal and inclusive decision-making process needs to be put in place to establish the longer-term GTHA fare structure vision.

The Metrolinx Board endorsed the phased strategy outlined by Leslie in the report. A follow-up report will be shared with the Board in December, outlining the means to advance the strategy.

See the update.

Auditor General Follow-up

The Director of Internal Audit, Peggy Gilmour, updated the Board on the current status and preliminary results of followup activities related to the Auditor General's findings. This includes two separate follow-up audits based on the 2012 and 2014 Value-for-Money Audits of the Regional Transportation Plan, as well as the Auditor General's 2016 Audit of Metrolinx - Public Transit Construction Contract Awarding and Oversight.

See the status <u>update</u>.

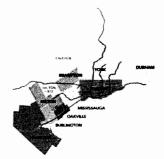
Customer Experience Committee Update

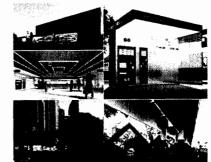
Marianne McKenna, Chair of Metrolinx's Customer Experience Committee, provided an update on recent customer service initiatives, including:

- new bus routes and expanded service on our rail corridors
- digital signs on accessibility coaches
- increasing PRESTO card adoption and system upgrades











• design excellence work underway to develop a cohesive set of Customer Experience guidelines for stations, vehicles and customer service that will guide all capital projects.

This Committee meets periodically to discuss initiatives and/or issues with potential to influence the overall customer experience.

See the full report.

Appointment of Officers

The Board accepted the appointment of executive officers at Metrolinx. As noted on August 24th, Phil Verster is the new Metrolinx CEO, effective October 1, 2017. Thom Budd is the new Vice President, Network Infrastructure and Darryl Browne is the new Vice President, Transit Operations.

View the Appointment of Officers Memo.

Corporate Reports

The 2016-2017 Annual Report, 2017-2018 Business Plan and the new Enterprise Risk Management Policy and Framework were approved by the Board.

Quarterly Team Reports

Updates on our <u>PRESTO</u>, <u>Operations</u>, <u>Planning and Policy</u>, <u>Capital Projects</u>, <u>Communications & Public Affairs</u> and <u>Customer Experience and Marketing</u> groups were submitted to the Board.

If you have any questions, please contact me anytime.

Thank you, Kelly

Kelly Thornton Senior Advisor, Communications and Public Affairs Metrolinx I 97 Front Street West I Toronto I Ontario I M5J 1E6 T: 416-202-5589 C: 416-706-6020 Kelly.thornton@metrolinx.com

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METROLINX

Office of Chair J. Robert S. Prichard Robert.Prichard@metrolinx.com (416) 202-5906

September 8, 2017

The Honourable Steven Del Duca Minister Ministry of Transportation Ferguson Block 3rd Floor 77 Wellesley Street West Toronto, ON M7A 128

Dear Minister Del Duca,

RE: <u>Response to your Letter of August 29, 2017</u>

l write in reply to your letter dated August 29, 2017 concerning the proposed new GO stations at Kirby Road in the City of Vaughan and Lawrence East in the City of Toronto.

Metrolinx will not enter into any contractual obligations or agreements with respect to the Kirby and Lawrence East stations unless and until the management and the Board are satisfied that the stations are justified. As you know, following the preliminary approval of these stations and ten others, we are engaged in detailed analysis of each proposed station including undertaking detailed designs and Environmental Assessments for each of them. We do not anticipate entering procurement contracts for these stations until the Spring of 2018 so there is ample time to complete the detailed analysis.

With respect to Kirby and Lawrence East in particular, I have asked management to initiate a thorough and comprehensive review of all the relevant analyses and information for each station and then report back to the Board. This will include requesting updated submissions from the City of Vaughan and the City of Toronto on proposed changes in land use and new proposed land developments in the areas served by the stations, updated population and jobs projections, local transit plans that may affect the catchment area, and any other relevant information for the areas served by these proposed stations. Management's work will also include updating the business case analyses for the stations, reviewing the proposed station designs and associated cost estimates, and incorporating the Regional Express Rail service plans for the Barrie and Stouffville corridors. We will complete the analysis by including consideration of municipal support and financial contributions, community readiness, the overall network effects of each proposed station and any other relevant consideration.

Once this work is completed, management will report to the Board with its recommendations whether or not to proceed with each of these stations and, if so, on what conditions and with what commitments from the City of Vaughan and the City of Toronto. The Board will make management's recommendations and background work publicly available in advance of considering the recommendations in a public session of the Board. I expect we will have management's recommendations before the Board not later than at our Board meeting scheduled for February 16, 2018.

You have confirmed to me that you will respect and support whatever conclusion the Board reaches and we will proceed on this basis.

Warm regards,

CTD8 0

J. Robert S. Prichard Chair

Ministry of Transportation

Office of the Minister

Ferguson Block, 3rd Floor 77 Wellesley St. West Toronto, Ontario M7A 1Z8 416-327-9200 www.ontario.ca/transportation Ministère des Transports

Bureau du ministre

Édifice Ferguson, 3° étage 77, rue Wellesley ouest Toronto (Ontario) M7A 128 416-327-9200 www.ontario.ca/transports



J. Robert S. Prichard Chair, Board of Directors Metrolinx 97 Front Street West Toronto, Ontario M5J 1E6

August 29, 2017

Dear Mr. Prichard:

I am writing today with respect to the proposed new GO stations at Kirby Road in the City of Vaughan, and Lawrence East in the City of Toronto.

I believe that it is critical for Metrolinx to plan and build transit infrastructure as communities grow. As we have learned, building after-the-fact is almost always more expensive and more disruptive, and leads to more regional gridlock in the interim.

In the specific case of Kirby, it is estimated that within the next ten to fifteen years, approximately 27,000 new residents could live in the area immediately adjacent to the station.

In addition, there are several significant residential and employment developments planned for areas to the west, some of which are already under construction. Many of those individuals living or working in these new communities would likely be inclined to access a GO station at Kirby, particularly when GO Regional Express Rail is providing two-way, all-day service at 15 minute intervals along the Barrie Corridor by 2024/2025.

I know that the Initial Business Cases are always a part of a process that evolves over time, especially as new information becomes available. As we have always said, all proposed new stations require additional technical and planning analysis, environmental assessments, preliminary and detailed design and extensive community engagement. That said, it is clear that concerns have been raised about the process by which the Kirby and Lawrence East stations were ultimately approved.

As I said in my public statements this week, I expect that Metrolinx will not enter into any contractual obligations or agreements with respect to the proposed Kirby and Lawrence East GO stations until relevant management staff and the Board are satisfied that both the land planning information provided by the City of Vaughan and the City of Toronto, along with the finalized RER service concept, justify this station. Further, if in the opinion of Metrolinx's management team and Board, the aforementioned information is not adequate to justify these stations, then both Kirby and Lawrence East GO stations should be deferred to the next round of consideration at a future date.

Please let me know if you require additional information or have any questions.

Regards,

Steven Del Duca Minister of Transportation

Afreen Raza

From:

Sent: To: Subject: Metrolinx <newsletter=metrolinx.com@mail121.atl31.mcdlv.net> on behalf of Metrolinx <newsletter@metrolinx.com> September-14-17 3:50 PM Clerks The Link - Board Meeting Recap

Is this email not displaying correctly? <u>View it in your browser</u>.



The Metrolinx Board of Directors met today to receive a number of reports, including updates on PRESTO, Metrolinx's capital projects, the next Regional Transportation Plan (RTP) and fare integration. Board Chair Rob Prichard addressed his correspondence with Minister Del Duca on the proposed Kirby Road and Lawrence East GO stations, which confirms that Metrolinx will not enter into any obligations or agreements unless and until management and the Board are satisfied these stations are justified, and that the Minister will respect and support whatever conclusion the Board reaches, - LEGELATIVE SERVICES

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1

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Maria Flammia

From:	Great Lakes Fund (MOECC) <greatlakesfund@ontario.ca></greatlakesfund@ontario.ca>
Sent:	September-18-17 3:55 PM
То:	Great Lakes Fund (MOECC)
Cc:	Great Lakes Fund (MOECC)
Subject:	Apply for a grant to protect the Great Lakes by November 10, 2017 / Demande de subvention pour la protection des Grands Lacs – jusqu'au 10 novembre 2017



Dear friends and Great Lakes Guardians,

The Great Lakes Guardian Community Fund, now in its sixth year, provides up to \$25,000 per project to restore and protect the Great Lakes and the rivers and streams that flow into them.

This year's fund will award \$1.5 million in total for eligible projects. The deadline to <u>apply</u> is November 10, 2017.

Since 2012, the Great Lakes Guardian Community Fund has awarded \$7.5 million to 375 communitybased projects, which supported more than 37,000 volunteers to plant over 285,000 trees and shrubs, release over 800,000 fish, create or enhance 760 kilometres of trail and collect over 2,800 bags of garbage.

People in the Great Lakes communities know what should be fixed on the shorelines of their hometowns. That's why they make for perfect Great Lakes Guardians and why we're proud to support 375 projects shored up by over 37,000 volunteers.

You too can become a Great Lakes Guardian by applying for a grant. Help us restore, protect, and conserve our Great Lakes to keep them drinkable, swimmable and fishable. Together we can make a real difference in Great Lakes communities across the province.

How to apply

- <u>Find out how</u> your organization could receive a grant of up to \$25,000
- Register and apply through <u>Grants Ontario</u>

Learn more

- <u>RSVP</u> to take part in an information Webinar:
 - September 27, 1 2:30 p.m.
 - October 4, 1 2:30 p.m.
- <u>Email</u> or call us at 416-325-4000,1-800-565-4923,TTY 416-326-9236 d toll-free 1-800-515-2759
- For an accessible application guide, send us an email:

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Chers amis et protecteurs des Grands Lacs,

Le Fonds d'action communautaire pour la protection des Grands Lacs, qui en est maintenant à sa sixième année, offre jusqu'à 25 000 \$ par projet pour restaurer et protéger les Grands Lacs et ses affluents.

Cette année, le Fonds investira 1,5 million de dollars au total dans les projets admissibles. La date limite pour <u>présenter une demande</u> est le 10 novembre 2017.

Depuis 2012, le Fonds d'action communautaire pour la protection des Grands Lacs a accordé 7,5 millions de dollars à 375 projets communautaires, permettant à plus de 37 000 bénévoles de planter plus de 285 000 arbres et arbustes, de relâcher plus de 800 000 poissons, d'aménager ou d'améliorer 760 km de sentiers et de recueillir plus de 2 800 sacs d'ordures.

Les gens qui vivent près des Grands Lacs savent ce qu'il faut faire pour restaurer les rives dans leurs collectivités. Ils sont donc des protecteurs parfaits pour les Grands Lacs et c'est la raison pour laquelle nous sommes fiers d'appuyer 375 projets portés par plus de 37 000 bénévoles.

Vous aussi pouvez protéger les Grands Lacs en présentant une demande de subvention. Aidez-nous à restaurer et à protéger les Grands Lacs afin que leur eau soit propre à la consommation, à la baignade et à la pêche. Ensemble, nous pouvons faire une réelle différence dans les collectivités des Grands Lacs.

Comment présenter une demande

- <u>Découvrez comment</u> votre organisation pourrait obtenir une subvention pouvant aller jusqu'à 25 000 \$.
- Inscrivez-vous et présentez votre demande par l'entremise de Subventions Ontario.

En savoir plus

- <u>RSVP</u> pour participer à un webinaire d'information :
 - Le 27 septembre, de 13 h à 14 h 30
 - Le 4 octobre, de 13 h à 14 h 30
- <u>Par courriel</u> ou par téléphone : 416 325-4000, 1 800 565-4923, ATS 416 326-9236 ou ATS sans frais 1 800 515-2759
- Pour obtenir un guide de présentation des demandes, envoyez un courriel à : <u>GreatLakesFund@ontario.ca</u>

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2097.

The Regional Municipality of Durham

Minutes

Durham Trail Co-ordinating Committee

September 7, 2017

A meeting of the Durham Trail Co-ordinating Committee was held on Thursday, September 7, 2017, in room 1-B, Main Level, Regional Headquarters, 605 Rossland Road East, Whitby, at 7:00 PM.

Present:	T. Clayton, Chair, Brock K. Jones, Vice Chair, Oshawa J. Back, Local Councillor, Scugog J. Ballinger, Regional Councillor, Uxbridge D. Carter, Regional Councillor, Oshawa G. Lodwick, Local Councillor, Brock I. McDougall, Scugog D. Pickles, Regional Councillor, Pickering C. Slaughter, Whitby D. Taylor, Uxbridge M. Weist, Ajax, left the meeting at 8:35 PM
Absent:	S. Collier, Regional Councillor, Ajax P. Davidson, Clarington A. Mujeeb, Pickering Joe Neal, Regional Councillor, Clarington E. Roy, Regional Councillor, Whitby
Also Present:	D. Barton, Local Councillor, Uxbridge
Staff Present:	 C. Leitch, Principal Planner, Planning and Economic Development Department S. McEleney, Planner, Planning and Economic Development Department D. Robertson, Project Manager, Transportation Infrastructure, Works Department P. Roy, Manager, Transportation Planning, Planning and Economic Development Department C. Bandel, Deputy Clerk, Corporate Services – Legislative Services

1. Adoption of Minutes

Moved by Councillor Carter, Seconded by C. Slaughter, That the minutes of the regular meeting of the Durham Trail Co-ordinating Committee held on June 1, 2017, be adopted.

CARRIED

2. Declarations of Interest

There were no declarations of interest.

3. **Presentations**

A) Ian McDougall and Keith Jones, DTCC Active Transportation Subcommittee Members – Draft Terms of Reference

> I. McDougall and K. Jones provided an update on the proposed amendments to the DTCC's Terms of Reference. A copy of the DTCC Terms of Reference was provided as Attachment #2 to the agenda. K. Jones reiterated that re-identifying the DTCC as the Durham Active Transportation Committee (DATC) would allow the Committee to focus on providing advice on all means of active transportation, including trails.

I. McDougall provided a brief overview of the changes to the Terms of Reference. He noted that the Vision, Goal, Mandate, Scope of Activities, and Composition sections were those with the most significant changes. He stated the composition of the Committee will be reduced from 16 members to 9 and will be made up of 8 citizen members and 1 Regional Councillor, plus an alternate. The quarterly meeting schedule will remain the same, with the ability for the Chair to call additional meetings if needed.

I. McDougall stated the current DTCC will continue for the remaining term of Council, with the same composition and that the implementation of the DATC would coincide with the new term of Council in 2018.

Discussion ensued with respect to whether it would be an asset for a member of a local active transportation committee to also sit as a member on the DATC. It was noted that although the number of Regional Councillors appointed to the Committee is being reduced to one, members of both Regional and local Councils can attend the meetings as observers.

- Moved by C. Slaughter, Seconded by Councillor Carter, That we recommend to the Committee of the Whole for approval and subsequent recommendation to Regional Council:
- A) That the Durham Trail Coordinating Committee be dissolved and replaced with a Durham Active Transportation Committee (DATC);
- B) That the proposed Terms of Reference for the DATC, as outlined in Attachment #2 to the agenda, be approved; and
- That the implementation of, and appointment of members to, C) the new DATC coincide with the new term of Council in 2018 and that the current DTCC remain in place up to that time. CARRIED
- Doug Robertson, Project Manager, Transportation Infrastructure; Chris Leitch, Principal Planner; and Sandra McEleney, Planner, Region of Durham, re: Draft Transportation Master Plan (Report #2017-COW-134)

D. Robertson and C. Leitch provided a PowerPoint presentation on the Draft Transportation Master Plan (Report #2017-COW-134). A copy of the Draft Transportation Master Plan was provided as Attachment #3 to the agenda.

D. Robertson stated the Transportation Master Plan (TMP) is a strategic planning document that focuses on all modes of transportation, including walking, cycling, public transit, cars and goods movement. He outlined the TMP development process and noted they are in the last phase which is the preparation of the Plan.

D. Robertson provided an overview of the key project milestones achieved to date. He also outlined the principles and key directions of the TMP.

C. Leitch reviewed the following key directions and actions of the TMP:

- Strengthen the bond between land use and transportation; ٠
- Elevate the role of integrated public transit including Rapid • Transit
 - Higher Order Transit Network

B)

- Make walking and cycling more practical and attractive
 Regional Cycling and Trail Network
 - Regional Cycling and Trail Network
 - Short Term Cycling Routes
- Promote sustainable travel choices
- Optimize road infrastructure and operation
 - 2031 Road Expansion Projects
- Improve goods movement to support economic development
- Invest strategically in the transportation system

D. Robertson discussed the financial implications and estimated capital costs of implementing the TMP. He stated the total capital cost for road expansion projects, rapid transit projects and cycling projects (which includes Regional infill projects and road expansion related projects) is \$1,749,519,000.

D. Robertson stated the guidelines in the TMP will support Development Charge By-laws; annual servicing and financing studies, and annual current and capital budgets; the Regional Official Plan; implementation strategies and action plans; Environmental Assessments; and other guideline documents. He outlined the next steps for the TMP review process and finalization and noted the TMP will be finalized based on comments received and will be brought before Committee of the Whole and Council later this year.

Detailed discussion ensued and the following questions and comments were provided by the Committee on the Draft TMP:

- The types of mitigating traffic calming measures that can be used on Regional Roads that run through rural hamlets;
- People seem to want other means of transportation other than roads but it requires a cultural change. To what degree are municipalities wrestling with this and providing options for other modes of transportation;
- Are developers taking into consideration the need for "walkable communities" in their plans;
- Concern that only 0.5% of financing is being directed to active transportation and that most funding is directed to paved shoulders; the predominant concentration of funding is on roads and more funding needs to be allocated to active transportation;
- Connectivity of safe cycling paths (paved shoulders) between communities is an issue. There are gaps that need to be addressed.

- Consideration given to Regional Roads that run through • downtowns and allowing municipalities to take lanes away for pedestrian traffic;
- Municipalities need to focus on the care and maintenance of cycling networks and multi-transportation networks;
- Nodal points are an issue as they aren't easily accessible when using a means of active transportation. There needs to be a focus on employment nodes and how people get there;
- Whether or not gas tax funding is included in the funding for the TMP; and
- Bus routes in Zephyr are not conducive for general public, only if you are a commuter. The schedule needs to be improved and more convenient.

The Committee thanked staff for such an informative presentation. Staff advised that the comments received from the Committee will be included with the comments received from other stakeholders for consideration during finalization of the TMP.

Councillor Dave Barton, Township of Uxbridge, re: Cycling Initiatives

> Councillor Barton, Township of Uxbridge, provided a PowerPoint presentation regarding the implementation of a cycling initiative in Uxbridge.

Councillor Barton stated Uxbridge is the Trail Capital of Canada. He provided an overview of the trail network in Uxbridge and the hard work and co-operation between the municipality, local partners and stakeholders that was instrumental in developing such an incredible trail network.

Councillor Barton stated Uxbridge is also a great place for cycling with guiet country roads that are hilly, beautiful and challenging. He stated local businesses also support cycling and see the economic value in cyclists. He noted, however, that there have been some challenges implementing a cycling plan due to a lack of support from Council and staff, safety concerns expressed by gravel companies and residents, and no budget.

Councillor Barton stated there is increasing support for a cycling plan and he will continue to work with Council, residents and businesses to raise awareness of the initiative and to get a cycling plan in place.

The Committee thanked Councillor Barton for his presentation.

C)

D) Chris Leitch and Sandra McEleney re: Ontario Municipal Commuter Cycling Program Submission

C. Leitch and S. McEleney provided an update on the short list of regional road cycling projects included in the Region's submission to the Ontario Municipal Commuter Cycling Program.

S. McEleney stated the OMCC Program is a provincial multi-year program with \$42.5 million available in the first year. All Ontario municipalities are eligible for annual OMCC funding to support up to 80% of costs associated with their implementation of eligible commuter projects. She stated the OMCC Program is supported by proceeds from Ontario's cap and trade program.

S. McEleney stated the Region's submission is due on September 8, 2017 and there has been extensive consultation with the area municipalities on the projects identified for OMCC Program funding. She added the projects must be constructed by 2020 which was a critical point in choosing the priority projects.

S. McEleney and C. Leitch provided an overview of the following 13 priority projects:

- 1. Bayly Street Multi-Use Path (MUP), Ajax
- 2. Westney Road MUP Extension, Ajax
- 3. Bloor Street MUP (Cycling Lanes), Clarington
- 4. Taunton Road MUP Extension, Oshawa
- 5. Wilson Road MUP (connects to Harmony Creek Trail), Oshawa
- 6. Thornton Road MUP, Oshawa
- 7. Victoria Street MUP (east of Thickson Road to Oshawa GO Station), Oshawa/Whitby
- 8. Rossland Road MUP (Garden Street to Gibbons Street), Oshawa/Whitby
- 9. Victoria Street MUP (west of Seaboard Gate/Waterfront Trail to South Blair Street), Whitby
- 10. Victoria Street MUP (South Blair Street to Thickson Road), Whitby
- 11. Hopkins Street Paved Shoulder Bike Lanes and Consumers Drive MUP, Whitby
- 12. Rossland Road MUP (Cochrane Street to Brock Street), Whitby
- 13. Cochrane Street Cycling Lanes, Whitby

S. McEleney stated the application will be submitted on Friday, September 9th. She also stated that once the application is submitted it can be updated as priorities change. She further stated staff will be working closely with the area municipalities on these priorities as well as on the coordination of projects.

Staff responded to questions regarding why there are no projects identified in the City of Pickering; and why there is no connection to Stevenson Road for the Victoria Street MUP (east of Thickson Road to Oshawa GO Station).

4. Information Items

A) <u>Transit Advisory Committee Minutes, June 6, 2017</u>

A copy of the Transit Advisory Committee minutes of June 6, 2017 was provided as Attachment #4 to the agenda.

B) Accessibility Advisory Committee Minutes, June 27, 2017

A copy of the Accessibility Advisory Committee minutes of June 27, 2017 was provided as Attachment #5 to the agenda.

C) Email Correspondence: A message from Minister Eleanor McMahon, May 2017 – "Ontario Trails of Distinction"

> A copy of the email correspondence from Minister Eleanor McMahon dated May 2017 was provided as Attachment #6 to the agenda.

> Moved by Councillor Carter, Seconded by Councillor Ballinger, That Information Items A) to C) respectively be received for information.

CARRIED

5. Other Business

A) Marking of Additional Signage on TransCanada Trail, Pickering

Councillor Pickles advised that the locations identifying where additional signage should go has been marked on the TransCanada Trail through the City of Pickering. He also advised that Arnold Mostert, the Working Group member from Pickering, can provide a brief presentation on this matter at the next DTCC meeting.

B) Durham Region Trails Brochure

S. McEleney advised that Economic Development staff will be updating the Durham Region Trails Brochure and will be seeking comments from the DTCC in early 2018.

6. Next Meeting

The next regularly scheduled meeting of the Durham Trail Coordinating Committee will be held on Thursday, December 7, 2017, in Room 1-B, Regional Headquarters Building, 605 Rossland Road East, Whitby, at 7:00 PM.

7. Adjournment

Moved by D. Taylor, Seconded by Councillor Carter, That the meeting be adjourned. CARRIED

The meeting adjourned at 8:58 PM.

T. Clayton, Chair, Durham Trail Coordinating Committee

C. Bandel, Deputy Clerk

If this information is required in an accessible format, please contact 1-800-372-1102 ext. 2097.

The Regional Municipality of Durham

MINUTES

DURHAM ENVIRONMENTAL ADVISORY COMMITTEE

September 14, 2017

A regular meeting of the Durham Environmental Advisory Committee was held on Thursday, September 14, 2017 in Boardroom 1-B, Regional Municipality of Durham Headquarters, 605 Rossland Road East, Whitby at 7:23 PM

Present: Also	 H. Manns, Chair, Clarington S. Clearwater, Whitby, Member at Large J. Henry, Regional Councillor, City of Oshawa, attended the meeting at 7:12 PM E. McRae, Whitby, attended the meeting at 7:23 PM W. Moss-Newman, Oshawa, Member at Large C. Pettingill, Brock, left the meeting at 7:37 PM K. Sellers, Vice-Chair, Ajax D. Stathopoulos, Member at Large
Present:	C. Junop, Youth Member
Absent:	 G. Carpentier, Scugog O. Chaudhry, Pickering G. Layton, Uxbridge, Member at Large K. McDonald, Vice-Chair, Uxbridge K. Murray, Clarington, Member at Large M. Thompson, Ajax, Member at Large
Staff Present:	 A. Bathe, Planner, Planning & Economic Development Department C. Tennisco, Committee Clerk, Corporate Services – Legislative Services
1.	Approval of Agenda
	Moved by K. Sellers, Seconded by S. Clearwater, That the agenda for the September 14, 2017, DEAC meeting, as presented, be approved. CARRIED
2.	Declarations of Interest

There were no declarations of interest.

Durham Environmental Advisory Committee - Minutes September 14, 2017

3. Adoption of Minutes

Moved by D. Stathopoulos, Seconded by C. Pettingill, That the minutes of the DEAC meeting held on Thursday, June 8, 2017 be adopted.

CARRIED

4. Presentation

There were no presentations to be heard.

5. Items for Action

Moved by D. Stathopoulos, Seconded by K. Sellers, That the agenda be altered in order to consider Item 5. B) Items for Action – Regional Tree By-law – DEAC Comments, next. CARRIED

B) <u>Regional Tree By-Law – DEAC Comments</u>

Correspondence dated August 28, 2017 from D. Pagratis, Project Planner, Planning Department, with attached Report #2017-INFO-84, By-law #31-2012, the Regional Tree By-law Information Pamphlet, Good Forestry Practices Permit Application, and Clear Cutting Permit Application was provided as Attachment #2 to the Agenda.

Discussion ensued regarding the issuance of permits for the removal of trees on municipal boulevards and private properties; the cutting of protected trees; and, the protection of a private tree of 30 cm or more.

Councillor Henry explained when the issuance for a permit for the removal of a tree applies under the provisions of the Regional Tree By-law, local area Municipal Tree By-law or both. He also reviewed the ash borer inoculation process used by the City of Oshawa and when the costs for the inoculation process maybe a better alternative versus the removing and replacing of the trees.

A. Bathe responded to questions regarding whether the consultation process for the review of the Regional Tree By-law will include an opportunity for public input.

Moved by Councillor Henry, Seconded by K. Sellers,

That the Committee members submit any comments on the five year review of the Regional Tree By-law to staff by September 22, 2017 to be presented for endorsement at the October 12, 2017 DEAC meeting.

CARRIED

At this point in the meeting C. Pettingill left the meeting and quorum was lost. The remaining agenda items were deferred to the October 12, 2017 DEAC meeting.

A) <u>Natural Areas as Neighbours Guide Approval</u>

Due to a lack of quorum, Item 5. A) was deferred to the October 12, 2017 DEAC meeting.

C) Durham Environmental Advisory Committee (DEAC) and Durham Agricultural Advisory Committee (DAAC) Workshop Update

Due to a lack of quorum, Item 5. C) was deferred to the October 12, 2017 DEAC meeting.

D) <u>Student Members Update</u>

Due to a lack of quorum, Item 5. D) was deferred to the October 12, 2017 DEAC meeting.

E) <u>Natural Features Map Update</u>

Due to a lack of quorum, Item 5. E) was deferred to the October 12, 2017 DEAC meeting.

6. Items for Information

A) The Ontario Aggregate Resources Corporation (TOARC) 2016 Annual Report

Due to a lack of quorum, Item 6. A) was deferred to the October 12, 2017 DEAC meeting.

 B) 2017-INFO-79: Commissioners of Planning and Economic Development and Finance – re: Bill 139, Building Better Communities and Conserving Watersheds Act, 2017; L01-02

Ontario Municipal Board Reform Initiative – Environmental Bill of Rights Registry No. 013-0590;

Amendments to the Conservation Authorities Act – Environmental Bill of Rights Registry No. 013-056;

Conservation Authorities Act Review Document, "Conserving Our Future: A Modernized Conservation Authorities Act" – Environmental Bill of Rights Registry No. 012-7583

Due to a lack of quorum, Item 6. B) was deferred to the October 12, 2017 DEAC meeting.

C) 2017-INFO-89: Commissioner of Works – re: Durham York Energy Centre Source Test Update

Due to a lack of quorum, Item 6. C) was deferred to the October 12, 2017 DEAC meeting.

7. Other Business

Due to a lack of quorum this item was not considered.

8. Next Meeting

The next regular meeting of the Durham Environmental Advisory Committee will be held on Thursday, October 12, 2017 starting at 7:00 PM in Boardroom 1-A, Level 1, 605 Rossland Road East, Whitby.

9. Adjournment

Moved by Councillor Henry, Seconded by K. Sellers, That the meeting be adjourned. CARRIED

The meeting adjourned at 7:37 PM.

H. Manns, Chair, Durham Environmental Advisory Committee

C. Tennisco, Committee Clerk

DURHAM NUCLEAR HEALTH COMMITTEE (DNHC) MINUTES

Location University of Ontario Institute of Technology (UOIT) 2000 Simcoe Street South, City of Oshawa Meeting Room 1058 in the Energy Research Building

Date September 15, 2017

Time 1:00 PM

Host UOIT

Members

Dr. Robert Kyle, Durham Region Health Department (DRHD) (Chair) Ms. Mary-Anne Pietrusiak, DRHD

Mr. Raphael McCalla, Ontario Power Generation (OPG)

Mr. Loc Nguyen OPG

Dr. Tony Waker, UOIT (Presenter)

Mr. Phil Dunn, Ontario Ministry of the Environment and Climate Change

- Dr. John Hicks, Public Member
- Ms. Janice Dusek, Public Member
- Mr. Marc Landry, Public Member
- Ms. Veena Lalman, Public Member
- Dr. David Gorman, Public Member
- Dr. Barry Neil, Public Member

Presenters/Observers

- Mr. Brian Devitt (Secretary)
- Ms. Tiasi Ghosh, OPG (Presenter)
- Mr. Robin Manley, OPG (Presenter)
- Mr. Kevin Powers, OPG (Presenter)
- Mr. Raoul Akakpo, OPG
- Ms. Analiese St. Aubin, OPG
- Ms. Pamela Khan, DRHD
- Ms. Sendi Struna, DRHD
- Ms. Janet McNeill, Durham Nuclear Awareness (DNA)
- Ms. Renee Cotton, DNA
- Ms. Lynn Jacklin, DNA
- Ms. Libby Racansky, Clarington Resident
- Ms. Lydia Skirko, Whitby Resident
- Ms. Marina Oeyangen, Organization of Canadian Nuclear Industries
- Mr. A.J. Kehoe, Durham Region Resident

Regrets

Mr. Hardev Bains, Public Member Dr. Lubna Nazneen, Alternate Public Member Mr. Ken Gorman, DRHD

Dr. Tony Waker introduced Dr. Akira Tokuhiro, the new Dean of the Faculty of Energy Systems and Nuclear Science at UOIT. Dr. Tokuhiro provided a warm welcome and he looks forward to working with the DNHC.

Robert Kyle opened the meeting and welcomed everyone and thanked UOIT and Dr. Tony Waker for hosting the meeting today.

1. Approval of Agenda

The Revised Agenda was adopted.

2. Approval of Minutes

The Minutes of June 16, 2017 were adopted as written.

3. Correspondence

3.1 Robert Kyle's office received the Minutes of the Pickering Nuclear Generating Station (NGS) Community Advisory Council meetings held on May 16, 2017.

3.2 Robert Kyle's office received a news release from the Canadian Nuclear Safety Commission (CNSC) concerning a Notice of Continuation of Public Hearing to consider an application by OPG to renew its Waste Management Facility (WMF) Operating Licence for the Pickering WMF to construct new facilities at the Pickering NGS dated June 1, 2017.

3.3 Robert Kyle's office received a news release the Nuclear Waste Management Organization (NWMO) concerning its focus on fewer potential host communities in its site selection process for a Deep Geological Repository (DGR) for Canada's used nuclear fuel dated June 23, 2017.

3.4 Robert Kyle's office received a report from the Region of Durham in response to the Provincial Discussion Paper entitled "Provincial Nuclear Emergency Response Plan (PNERP) Planning Basis Review and Recommendation" prepared by Warren Leonard, Director, Durham Emergency Management Office, dated June 23, 2017.

3.5 Robert Kyle's office received a newsletter from OPG providing a progress report on the Darlington Refurbishment Project dated June 23, 2017.

3.6 Robert Kyle's office received a newsletter from OPG, Neighbours Pickering and Darlington Nuclear, providing information on several community related issues dated Summer 2017.

3.7 Robert Kyle's office received a news release from the CNSC concerning the April 5, 2017 request for addition information from OPG for the proposed DGR at the Bruce Nuclear site. OPG's response has adequately addressed the issues that will enable the Canadian Environmental Assessment Agency to prepare a draft report and update the environmental assessment conditions that will be required if the project proceeds dated June 27, 2017.

3.8 Robert Kyle's office received a news release from Natural Resources Canada concerning its Discussion Paper on the Review of Environmental and Regulatory Processes to modernize the environmental assessment and regulatory processes to ensure good projects go ahead and resources get to market sustainably dated June 29, 2017.

3.9 Robert Kyle's office received a report from the Canadian Environmental Law Association (CELA) in response to the Provincial Discussion Paper entitled "PNERP Planning Basis Review and Recommendation" prepared by Theresa McClenaghan, Executive Director and Counsel, CELA, dated July 28, 2017.

3.10 Robert Kyle's office received an invitation from CNSC for the public to comment by December 27, 2017 on its Discussion Paper on the Framework for Recovery in the Event of a Nuclear or Radiological Emergency dated August 25, 2017.

3.11 Robert Kyle's office received a follow-up report from Cammie Cheng on behalf of Raphael McCalla, Director, Nuclear Environmental Programs, OPG, concerning several technical issues that needed further investigation from Raphael's presentation at the June 16th DNHC meeting about the results of the 2016 Environmental Monitoring Program dated August 25, 2017.

3.12 Robert Kyle's office received a newsletter from OPG providing an update on the Darlington Refurbishment Project dated August 28, 2017.

3.13 Robert Kyle's office received a news release from CNSC concerning the Near Surface Disposal Facility proposed by Canadian Nuclear Laboratories (CNL) for their Chalk River Laboratory site and the additional information required of CNL for the federal environmental assessment pursuant to the Canadian Environmental Assessment Act dated August 31, 2017.

4. Presentations

4.1. Progress report by OPG concerning the proposed Continued Operation of the Pickering NGS

Robin Manley, Vice-President, Nuclear Regulatory Affairs and Stakeholder Relations, OPG, provided a progress report on the Pickering Station Operations through to 2024.

Robin provided some information about OPG's licence renewal that included:

- August 28, 2017, OPG submitted its licence renewal application to the CNSC and posted the application on the OPG website <u>opg.com</u>.
- The application is for a 10-year licence renewal to cover the period from September 1, 2018 to August 31, 2028.
- OPG's proposal is to operate the Pickering NGS until the end of 2024.
- The licence period between 2024 and 2028 will allow for safe storage activities such as removal of nuclear fuel and water.

Robin explained that in January 2016, the Government of Ontario announced that it would pursue continued operations at Pickering through 2024. The main reason for the Provinces decision to continue the operation of Pickering was the planned refurbishment schedules at Darlington and Bruce NGSs.

Robin reviewed Pickering NGS strong safety performance rating that is in the nuclear industry's top quartile and Pickering also has a strong operational reliability rating. For 2016, the CNSC rated the Pickering NGS as "Fully Satisfactory" in its annual Safety and Performance Regulatory Oversight Report.

Robin reviewed the benefits of the continued operations of Pickering to 2024 that will significantly benefit Ontario's environmental program to reduce greenhouse gas emissions.

Robin provided a very detailed Pickering Relicensing Schedule that included:

- August 2017, Licence Application submitted by OPG to CNSC.
- October 2017, OPG will submit its Global Assessment Report.
- November 2017, OPG will submit its Integrated Improvement Plan.
- December 6-7, 2017, OPG will host the Unified Control Emergency Preparedness Exercise to be held at Pickering NGS.
- March 2018, OPG expects to receive CNSC's acceptance of the Integrated Improvement Plan.
- April 2018, CNSC's Public Hearing Part 1 will be held.
- June 2018, CNSC's Public Hearing Part 2 will be held.
- August 2018, OPG expects CNSC's approval for the Pickering operating licence renewal.

Robin mentioned the on-going Public Information and Engagement activities includes OPG's commitment to openness and providing information on a regular basis using a range of tools including the social media, community newsletters, website and TV advertising. Pickering Nuclear will also be holding its Fall Community Information Sessions on October 24-26.

Robin Manley or his associates will continue to update the DNHC on the Continued Operation of Pickering NGS to 2024. For more information, Robin can be contacted at <u>robin.manley@opg.com</u>. The slides Robin used in his presentation are available for review at the DNHC website at durham.ca/dnhc.

4.2. Progress Report by OPG concerning the Results of the 2016 Groundwater Monitoring Program at Pickering and Darlington NGSs

Tiasi Ghosh, Environmental Advisor, Nuclear Environmental Programs, OPG, provided a detailed presentation of the results of the 2016 Groundwater Monitoring Program.

Tiasi indicated the Key Objectives of the 2016 Program were:

- To verify groundwater flow and directions.
- To monitor changes to on-site groundwater quality to identify new issues in a timely manner and assess past contamination issues.
- To monitor site boundary groundwater quality to confirm there is no adverse off-site impacts.

Tiasi provided the highlights of the groundwater monitoring at the Pickering NGS which are the results of a legacy of spills and leaks.

- In 2016, Pickering used 140 wells or monitoring locations and analysed water samples to characterize groundwater conditions. This revealed improved or stable areas at Pickering where there have been legacy spills or leaks.
- The Upgrading Plant Pickering continues to exhibit a decrease in tritium concentrations.
- Corrective actions at the Unit 1 to 4 Reactor Building Area have led to significant reduction in tritium concentrations.
- The Fuel Oil Storage Tanks spills resulting in legacy fuel oil in groundwater is naturally breaking down due to the bio-degradation process.
- The Unit 5 to 8 Reactor Building area has experienced historic small leaks from the foundation drainage sumps resulting in:
 - Equipment is being replaced as required.
 - Work continuing as part of an established preventative maintenance program.
 - In 2016, an emerging issue was identified in Unit5/6 area resulting in a detailed investigation being conducted and corrective action was implemented and monitoring will continue.

- The Unit 5 to 8 Irradiation Fuel Bay (IFB) experienced elevated tritium concentrations in groundwater and a project is underway to mitigate releases from the IFB which involves conducting inspections and repairs as needed to the IFB sumps and lining.
- Monitoring of the site boundary groundwater quality showed no indications of adverse off-site impacts from Pickering groundwater.

Tiasi provided the highlights the groundwater monitoring at the Darlington NGS that included:

- In 2016, Darlington used 78 wells or monitoring locations and analysed water samples to characterize groundwater conditions.
- There was a slight change in groundwater flow conditions within the Protected Area and water levels are recovering.
- Groundwater monitoring of tritium in the Protected and Controlled Areas showed that concentrations were stable at low concentrations.
- Monitoring of the site boundary groundwater quality indicated that there were no adverse off-site impacts from Darlington groundwater.

Tiasi provided a summary of the 2016 Groundwater Monitoring Program that included:

- At Pickering, predominant groundwater flow pattern remains unchanged from the original interpretations.
- Discrete, local change to Darlington's groundwater flow condition within the Protected Area continued in 2016.
- Legacy groundwater quality results at both sites continue to improve and monitoring will continue.
- Emerging issue was identified at Unit5/6 area at Pickering and mitigation will continue.
- There is no indication of adverse, off-site mitigation of tritium at Pickering and Darlington sites.
- Annual groundwater monitoring results for both sites are submitted to the CNSC.

Tiasi Ghosh or her associates will update the DNHC next year with 2017 Groundwater Monitoring Program results for Pickering and Darlington NGSs.

For more information on the Program, Tiasi can be contacted at <u>tiasi.ghosh@opg.com</u> or 416-231-4111 extension 4230. The slides Tiasi used in her presentation are available for review on the DNHC website at durham.ca/dnhc.

4.3. Progress report by OPG concerning planned Nuclear Emergency Preparedness Communications

Kevin Powers, Director, Corporate Relations and Communications, OPG, provided an update on OPG's recent nuclear emergency preparedness communication initiatives.

Kevin reported that nuclear emergency preparedness awareness has improved significantly with the distribution of the flashlight product in 2013 and the distribution of potassium iodide (KI) pills in 2015. In May 2017, OPG had a public survey conducted to measure residents' awareness of nuclear emergency preparedness who live within 10km of the Pickering and Darlington NGSs and the results were:

- 50% of residents remember and have kept the 2013 flashlight product.
- 80% of residents remember and have kept the KI pills from the 2015 campaign.
- 92% of residents feel the information contained in these two campaigns was important.
- 88% of residents would be receptive to updated information.
- 90% of residents would like the updated information in print and on a website.

Kevin indicated that OPG is now working with the Region of Durham, the City of Toronto, Ontario's Office of the Fire Marsal and Emergency Management on a new nuclear emergency preparedness product. The new product will be a small emergency kit that will get families started preparing for emergencies.

Kevin mentioned the small emergency kit will contain emergency preparedness information about what to do in case of a nuclear emergency. The distribution of the kit will be in the last week of November 2017 and include approximately 130,000 households within 10km of the Pickering and Darlington NGSs.

Kevin Powers or his associates will continue to update the DNHC on nuclear emergency preparedness communications. For more information, Kevin can be contact at <u>kevin.powers@opg.com</u>.

4.4. Progress Report by UOIT concerning their Faculty of Energy Systems and Nuclear Science

Dr. Tony Waker, Professor, UOIT, provided a progress report on the educational and research activities in the Faculty of Energy Systems and Nuclear Science at UOIT. The highlights of Tony's presentation were:

- The 2017-18 Undergraduate Programs and student enrolments are:
 - Bachelor of Nuclear Engineering 72 students
 - Bachelor of Engineering in Energy Systems Engineering 0
 - Bachelor of Applied Science in Nuclear Power 0
 - Bachelor of Science in Health Physics & Radiation Science 6
 - Bachelor of Technology in Sustainable Energy Systems in 2018-19
 - o Bachelor of Nuclear Power Bridge Program 0
- The Graduate Programs and student enrolments are:
 - Graduate Diploma In Nuclear Technology (GDip) 157 students
 - Master of Engineering (MEng) 19
 - Master of Applied Science (MASc) 19
 - Doctor of Philosophy (PhD) 23
 - At the June 2017 convocation, graduate degrees presented were: 14 GDip, 7 MEng, 5 MASc and 2 PhD.
- UOIT also offers an extensive Internship Program to help introduce young scientists and engineers to the nuclear industry and workplaces. The Program partners with many companies including: OPG, CNSC, Bruce Power, SNC Lavalin, Canadian Nuclear Laboratories, AMEC, Lakeside Process Controls and Oshawa PUC. In 2017, 2 co-op and 24 intern students were involved in the Program at UOIT.

Tony provided some very interesting technical information on research projects that he and his associates were working on with their students in the well-equipped nuclear laboratories at UOIT.

Dr. Tony Waker or his associates will update the DNHC next year on the progress of the Faculty of Energy System and Nuclear Science at UOIT. More information can be accessed <u>nuclear.uoit.ca</u> or by contacting Tony at <u>anthony.waker@uoit.ca</u>. The slides Tony used in his presentation are available for review on the DNHC website at durham.ca/dnhc.

5. Communications

5.1. Community Issues at Pickering Nuclear

Kevin Powers, Director, Corporate Relations and Communications, OPG, provided an update on Community Issues at Pickering Nuclear and the highlights were:

- Pickering received a "Fully Satisfactory" rating by the CNSC for 2016 in its annual Safety and Performance Regulatory Oversight Report.
- Pickering will be hosting a series of Community Information Sessions from 5:30 to 8:30pm on:
 - October 24 at the Toronto Pan Am Sports Centre, 875 Morningside Avenue, Toronto

- October 25 at the Pickering Recreation Centre, 1875 Valley Farm Road, Pickering
- October 26 at the Pickering Nuclear Information Centre, 1675 Montgomery Park Road, Pickering
- The next edition of the *Neighbours Newsletter* will be distributed in October.

Analiese St. Aubin, Manager, Corporate Relations and Communications, Pickering Nuclear, OPG, can be reached at (905) 839-1151 extension 7919 or by e-mail at <u>analiese.staubin@opg.com</u> for more information.

5.2. Community Issues at Darlington Nuclear

Kevin Powers, Director, Corporate Relations and Communications, OPG, provided an update on the Community Issues at Darlington Nuclear and the highlights were:

- Darlington received a "Fully Satisfactory" rating by the CNSC for 2016 in its annual Safety and Performance Regulatory Oversight Report.
- The next edition of the *Neigbours Newsletter* will be distributed in October.
- Darlington will be hosting its Refurbishment Open House on November 18 from 10:00am to 4:00pm at the Darlington Energy Complex, 1855 Energy Drive, Courtice

Jennifer Knox, Manager, Corporate Relations and Communications, Darlington Nuclear, OPG, can be reached at (905) 697-7443 or by e-mail at jennifer.knox@opg.com for more information.

6. Other Business

6.1. Topics Inventory Update

Robert Kyle indicated the Topics Inventory will be revised to include the presentations made today.

6.2. Future Topics for the DNHC to Consider

Robert Kyle indicated the theme of the next DNHC meeting scheduled for November 17, 2017 will be *Reports by CNSC, OPG and the Port Hope Area Initiative* (PHAI) that may include:

- Progress report by CNSC concerning the 2016 Safety and Performance Reports for Darlington and Pickering Nuclear Power Plants.
- Progress reports by OPG concerning the Darlington Refurbishment Project.
- Progress Report by OPG concerning the Management of Refurbishment Waste at Darlington NGS

• Progress report by PHAI Management Office concerning the Port Granby Project.

6.3. Scheduled DNHC Meetings in 2018

- January 19 to be hosted by DRHD in Meeting Room LL-C
- April 13 to be hosted by DRHD in Meeting Room LL-C
- June 15 to be hosted by DRHD in Meeting Room LL-C
- September 14 to be hosted by UOIT
- November 16 to be hosted by DRHD in Meeting Room LL-C

7. Next Meeting

	Location	Durham Regional Headquarters 605 Rossland Road East Town of Whitby, Ontario Meeting Room LL-C
	Date	November 17, 2017
	Time	12:00 PM Lunch served 1:00 PM Meeting begins
	Host	DRHD
8.	Adjournment	4:20 PM.

Action Items Committee of the Whole and Regional Council

Meeting Date	Request	Assigned Department(s)	Anticipated Response Date
September 7, 2016 Committee of the Whole	Staff was requested to provide information on the possibility of an educational campaign designed to encourage people to sign up for subsidized housing at the next Committee of the Whole meeting. (Region of Durham's Program Delivery and Fiscal Plan for the 2016 Social Infrastructure Fund Program) (2016-COW-19)	Social Services / Economic Development	October 5, 2016
September 7, 2016 Committee of the Whole	Section 7 of Attachment #1 to Report #2016-COW-31, Draft Procedural By-law, as it relates to Appointment of Committees was referred back to staff to review the appointment process.	Legislative Services	First Quarter 2017
October 5, 2016 Committee of the Whole	That Correspondence (CC 65) from the Municipality of Clarington regarding the Durham York Energy Centre Stack Test Results be referred to staff for a report to Committee of the Whole	Works	
December 7, 2016 Committee of the Whole	Staff advised that an update on a policy regarding Public Art would be available by the Spring 2017.	Works	Spring 2017
January 11, 2017 Committee of the Whole	Inquiry regarding when the road rationalization plan would be considered by Council. Staff advised a report would be brought forward in June.	Works	June 2017

Meeting Date	Request	Assigned Department(s)	Anticipated Response Date
January 18, 2017 Council	In light of the proposed campaign self-contribution limits under Bill 68 and the recent ban on corporate donations which will require candidates for the elected position of Durham Regional Chair to raise the majority of their campaign funds from individual donors, staff be directed to prepare a report examining the potential costs and benefits of a contribution rebate program for the Region of Durham.	Legislative Services	Fall 2017
March 1, 2017 Committee of the Whole	Staff was directed to invite the staff of Durham Region and Covanta to present on the Durham York Energy Facility at a future meeting of the Council of the Municipality of Clarington.	Works	
March 1, 2017 Committee of the Whole	Staff was requested to advise Council on the number of Access Pass riders that use Specialized transit services.	Finance/DRT	March 8, 2017
March 1, 2017 Committee of the Whole	A request for a report/policy regarding sharing documents with Council members.	Corporate Services - Administration	Prior to July 2017

Meeting Date	Request	Assigned Department(s)	Anticipated Response Date
May 3, 2017 Committee of the Whole	Discussion ensued with respect to whether data is collected on how many beds are created through this funding; and, if staff could conduct an analysis of the Denise House funding allocation to determine whether an increase is warranted. H. Drouin advised staff would investigate this and bring forward this information in a future report.	Social Services	
May 3, 2017 Committee of the Whole	Discussion ensued with respect to whether staff track the job loss vacancies in Durham Region, in particular the retail market. K. Weiss advised that staff will follow-up with the local area municipalities and will report back on this matter.	Economic Development & Tourism	
June 14, 2017 Council	That staff be authorized to distribute the Draft Transportation Master Plan to the area municipalities and other stakeholders for their review and comment and report back to Regional staff by the end of September 2017.	Works	
June 14, 2017 Council	That the concerns raised from the John Howard Society of Durham Region be referred to Social Services staff to provide assistance or advice to the John Howard Society and that a report be brought back to Council in September, 2017.	Social Services	September 2017
September 6, 2017 Committee of the Whole	Staff was asked to provide Council the schedule for the upcoming consultations meetings with the local business community and stakeholder regarding the Vacant Unit Rebate and Vacant/Excess Land Property Tax Policy	Finance	

Meeting Date	Request	Assigned Department(s)	Anticipated Response Date
September 6, 2017 Committee of the Whole	Staff was asked to prepare a report providing a comparison of Regional staffing levels over the last 5 years with respect to staffing levels required to meet Regional growth. R.J. Clapp advised staff will bring back a report to be considered at the next Committee of the Whole meeting with the budget guidelines.	Corporate Services – Administration/ Finance	October 4, 2017
September 6, 2017 Committee of the Whole *Also see January 18, 2017*	Councillor Parish referenced a motion made at the January 8, 2017 Regional Council meeting regarding a Contribution Rebate Program as detailed below: "In light of the proposed campaign self-contribution limits under Bill 68 and the recent ban on corporate donations which will require candidates for the elected position of Durham Regional Chair to raise the majority of their campaign funds from individual donors, staff be directed to prepare a report examining the potential costs and benefits of a contribution rebate program for the Region of Durham." D. Beaton advised that staff would bring a report back at the November Committee of the Whole meeting.	Legislative Services	November 1, 2017
September 6, 2017 Committee of the Whole	The following motion was moved by Councillor Parish and Councillor Collier: That the delegation of Greg Milosh regarding cost payment for unused sick days be referred to staff for a report to be brought back to Committee of the Whole by December 31, 2017.	Finance	By Dec 31/17

Meeting Date	Request	Assigned Department(s)	Anticipated Response Date
September 6, 2017 Committee of the Whole	The following motion was moved by Councillor O'Connor and Councillor Ryan: That the Commissioner of Finance review the reporting	Finance	October 4, 2017
	requirements for over-expenditures that will utilize the contingency provisions of a project and report back on potential modifications to the October Committee of the Whole.		