



**BeHealthy**  
**Health initiatives with emphasis on Geospatial and/or Smart Health Information**

Full day event  
**Wednesday February 20<sup>th</sup>**  
*Mississauga Grand Event Centre*  
 35 Brunel Rd Mississauga, ON L4Z 3E8

8:00 – 8:30 **BeHealthy setup**

8:30 – 9:15	Registration and Breakfast Short opening remarks
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**3 Morning Sessions**

9:15-9:55 #1	<b>The Spatial Pattern Modeling of Tobacco Complaints</b>  <b>Hongcheng Zeng</b> , Business Intelligence Specialist, The Region of Peel
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<b>Bio</b>	<b>Abstract</b>	<b>Moderator</b>
<p><b>Hongcheng Zeng</b> completed his PhD in GIS in the University of Eastern Finland in 2006. After his PhD study, he worked in Tulane University, University of Windsor, and University of Toronto, Ontario provincial government and CitiBank in USA.</p> <p>Right now, he is working in Peel Region as a specialist of business intelligence. He is mainly interested in quantitative decision making, advanced data modeling, spatial analysis, and artificial intelligence. Hongcheng used to develop new computer algorithm and technologies to solve the complicated problems, which cannot be solved by conventional commercial software.</p>	<p>The <b>Health Protection Division within Public Health at the Region of Peel</b> is responsible for inspecting tobacco retailers, providing education to retailers and at schools and for investigating tobacco-related complaints. As the team has six inspectors, the geographical area of Peel Region is divided into six territories and each territory is assigned one inspector. Before the territory planning, the workload in terms of inspection/investigation time need to be assessed so that each territory will have equal amount of workload. The workload of tobacco inspection includes compliance inspection, complaint investigation and requested services.</p> <p>This presentation will only focus on the workload evaluation of complaint investigation. We analyzed the spatial patterns of the tobacco complaints, tobacco retailers, schools and land use information. The correlation between these factors was analyzed. Finally, a predictive model was developed to predict the future complaint occurrence using impact variables, such as retailers and commercial areas. The output of the model was used for the workload prediction in the territory planning. This spatial modeling approach developed in our work is portable and can be applied in a variety of fields.</p>	Marc Baila

9:55 – 10:00 **short transition**

<p>10:00-10:40 #2</p>	<p align="center"><b>Multi-Volume Story Map Health Atlas Report</b>  <b>Leveraging Structure and Flexibility of Story Map Templates for distributing comprehensive health topics</b></p> <p align="center"><b>Adam Munro</b>, GIS Technologist, City of Hamilton</p>	
<p align="center"><b>Bio</b></p> <p><b>Adam Munro:</b> With nearly ten years of ArcGIS experience from across the country, Adam has been able to leverage that familiarity with GIS applications to create health-related products well-suited to both Health professionals, and the general public alike. Working with Hamilton’s IT and Public Health Services, Adam has been able to take advantage of several online and traditional applications to enhance the profile and effectiveness of GIS in health reporting and tracking issues for the City.</p>	<p align="center"><b>Abstract</b></p> <p>Online utilization and management of spatial data through web-based applications within Public Health organizations for surveillance and reporting of case events has been common in recent years. Web-based storage and display of health data through GIS providers, such as Esri, have been useful in linking health issues to a broader public, but recent implementation of online applications, such as Esri’s Story Map, can now collate broad amounts of geospatial health data into a narrative format, providing context and enhanced functionality to public outreach and reporting to community stakeholders in a more palatable manner. The City of Hamilton has developed a Student Youth Health Atlas, exercising traditional mapping conventions to convey health conditions of students throughout Hamilton Ontario, but leverages the structural framework of the Online Esri story map platform to create a narrative reporting system which tackles several key health, social and economic issues facing school-aged children today.</p> <p>This presentation will demonstrate:</p> <ul style="list-style-type: none"> <li>- taking advantage of the flexibility of building an online reporting product within various template designs in ArcGIS Online to inform policy planners in various school and outreach positions.</li> <li>- the use of Story Maps to collect and display of child-related health issues to reach a multi-disciplinary audience.</li> <li>- taking advantage of having one authoritative product which can be easily distributed online and help influence policy strategy but can also be digested by the public for its easy format and effective geospatial data visualization.</li> </ul>	<p align="center"><b>Moderator</b></p> <p>Marc Baila</p>
<p align="center">10:40 – 10:45 short transition</p>		
<p>10:45 -11:25 #3</p>	<p align="center"><b>Community Hubs Mapper: Open Source GIS for Evidence-Based Community Planning</b></p> <p align="center"><b>Brian Mosley</b>, GIS Analyst ,KFL&amp;A Public Health</p>	

	<b>Bio</b>	<b>Abstract</b>	<b>Moderator</b>
	<p><b>Brian Mosley</b> leads GIS projects for KFL&amp;A Public Health, including internal evaluations of locally driven public health programs, as well with KM's acclaimed informatics and eHealth portfolios. He has been working with KFL&amp;A Public Health since attaining a Masters degree in Geography from the University of Ottawa in 2012. Working with the KM team has given Brian opportunity to fine-tune his skills with public health-oriented geo-spatial applications, such as modelling urban heat islands for urban centres across Ontario, mapping food deserts to support local food security initiatives, and developing online situational awareness tools that enable public health action using real-time data.</p>	<p>This presentation will introduce the concept of Community Hubs and the Community Hubs Mapper. Community hubs have existed for years—some, like libraries and arenas—are easily and broadly recognized as community centres. They provide invaluable services within our communities, like access to social services or healthcare, as well as places for community members to meet, interact, and share resources. Community hubs can help social services reach clients in an equitable manner. The Community Hubs Mapper is an online tool that can help plan a new community hub, or help an existing one grow. Users can layer information on a map—information like the location of housing and shelters, youth mental health supports, justice and legal services, community care access centres, and schools, with demographics such as population density, age, and estimates of social and financial vulnerability. The Mapper is easy to use and allows all people involved in planning to have the same access to community-specific information. Seeing relevant information on a map makes it easier to identify resource gaps and community needs letting planners make better decisions. This ultimately leads to better access to social services for Ontarians. This presentation will give a background on the Community Hubs project and take the audience through a demonstration of how the tool to could be applied to integrated planning.</p>	John Bacon
<b>11:25 – 12:30 lunch</b>			
<b>3 Afternoon Sessions</b>			
12:30-1:10 #4	<p><b>Using Neighbourhood Mapping to Fund Prosperity Projects in the Niagara Region</b></p> <p><b>Marc Todd</b>, Manager, Niagara Region Community Services</p>		
	<b>Bio</b>	<b>Abstract</b>	<b>Moderator</b>
	<p><b>Marc Todd</b> has been a manager with Niagara Region Community Services, Social Assistance and Employment Opportunities (SAEO) since 2008. Marc's portfolio includes managing the Niagara Prosperity Initiative (NPI). In 2008, Niagara Regional Council</p>	<p>This presentation will provide an overview of the development and growth of the Niagara Neighbourhood Mapping tool and how this tool has been used to allocate annual funding of \$1.5M over the last ten years to projects aimed at increasing neighbourhood prosperity.</p> <p>By focusing on neighbourhoods that require attention, Niagara Prosperity Initiative (NPI) ensures that available</p>	Marc Baila

<p>approved annual funding of \$1.5 million dollars to increase prosperity for Niagara residents living in poverty. The NPI focuses on neighbourhood based interventions. Marc is also a coordinating committee member for the Niagara Poverty Reduction Initiative; working to wipe out poverty through education, collaboration and advocacy.</p>	<p>resources are making the greatest impact on those most in need. To assist in developing plans for action, the Niagara Prosperity Initiative Story Map was created with municipal and neighbourhood demographics, indicators, community resources and previously approved projects. The tool provides information on 74 neighbourhoods in Niagara.</p> <p>Proposals are invited from the community for projects that will provide an effective service to address poverty at a neighbourhood level for residents of the Niagara region. Non-profit organization who submit proposals for projects are expected to work with the people that they serve in identifying needs or gaps in service in their communities that can be addressed through NPI funding. It is mandatory that agencies use the neighbourhood mapping tool to review demographics, community resources, previously approved NPI projects and indicators in their application and the review of applications looks at data to ensure funding is allocated in neighbourhoods identified as requiring attention.</p> <p>Neighbourhood indicators include: Low Income Measure After-Tax; Household Income Under \$20,000 After-Tax; Working Poverty; Income Inequality; Tenants Paying 30% or more Income on Rent; Unemployment; No Highschool Diploma Age 25-64; Early Development Instrument; and Child Care Subsidy Age 0-12 per 100 children.</p>	
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[1:10 – 1:15 PM short transition](#)

<p>1:15 – 2:25 PM #5</p>	<p><b>Using Story Maps to Display Public Health Data: the Region of Peel – Healthy Development: Monitoring Map</b></p> <p><b>David Guillette</b>, Specialist, Data &amp; GIS, Region of Peel  <b>Maria Mukhtar</b>, Analyst, Research and Policy, Region of Peel</p>
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<p>Bio</p>	<p>Abstract</p>	<p>Moderator</p>
<p><b>David Guillette</b>  David is a GIS Specialist at the Region of Peel with eight years of experience working across various levels of government. He studied at Laurentian and Lakehead with a focus on history, geography and education, prior to earning a post-graduate certificate in GIS. His interests include human geography, demographics, spatial analysis related to sustainable</p>	<p>The impact of the built environment on chronic disease risk factors, such as physical activity levels, is increasingly being recognized. The Region of Peel – Public Health is committed to creating healthier built environments that increase the opportunities for residents to walk, cycle and take public transit. However, to evaluate the effectiveness of these Public Health interventions, we first require a quantitative understanding of the existing built environment infrastructure available in Peel’s neighbourhoods. Thus, the Region of Peel – Public Health partnered with Peel Data Centre to leverage GIS to create a series of indicators that map out the spatial distribution</p>	<p>John Bacon</p>

<p>communities and cartography.</p> <p><i>Maria Mukhtar</i>  <b>Maria Mukhtar</b>, MA, is a Research and Policy Analyst at the Region of Peel, Public Health in the Chronic Disease and Injury Prevention Division on the Built Environment Team. Her interests include healthy land use planning and community design. She studied Political Science and Geography at the University of Toronto</p>	<p>of built environment elements in Peel. These indicators are presented in a Story Map format titled the Healthy Development: Monitoring Map.</p> <p>This presentation focuses on the Healthy Development: Monitoring Map, a user-friendly, interactive Story Map that provides quantitative data on the presence of health-promoting built environment attributes. The Story Map acts as a standalone resource to understand Public Health’s role in promoting healthier, complete communities. Presenting the indicators in a Story Map is a novel communication approach that combines qualitative approaches that allow audiences to gain familiarity with the concept of healthy, complete communities and decision-makers with readily accessible quantitative built environment data. Using a Story Map can enhance audience engagement and help disseminate public health data.</p>	
<p>2:25 – 2:30 PM short transition</p>		
<p>2:30 – 3:10 PM #6</p>	<p><b>Cycling Community Resources available in the Toronto Police Public Safety Data Portal</b></p> <p><b>Debbie Verduga</b>, Crime Analyst, Toronto Police Service</p>	
<p style="text-align: center;"><b>Bio</b></p> <p>Debbie Verduga is a Crime Analyst with the Toronto Police Service Business Intelligence and Analytics Unit. As a Geographic Information Systems (GIS) analyst, she is responsible for providing analytical and technical support to decision makers in tactical and strategic management of operations. Debbie has also led the implementation of an Open Data Strategy including creation of the Toronto Police Service Public Safety Data Portal. As part of the Open Data Literacy program, she is responsible for engaging a wide range of community members and providing training and information related to police open data.</p>	<p style="text-align: center;"><b>Abstract</b></p> <p>The Toronto Police Service (TPS) and the City of Toronto have partnered to collaboratively provide the public with access to traffic collision data including collisions events where a Cyclist was involved. The Toronto Police Service is committed to providing valuable resources on the Public Safety Data Portal in attempt to raise awareness of public safety matters concerning the Cycling Community in the City of Toronto. Debbie Verduga, a Crime Analyst and GIS analyst in the Business Intelligence Unit at TPS will be showcasing some of the resources available in the portal related to cycling including bike theft statistical information and cyclist traffic collision events.</p>	<p style="text-align: center;"><b>Moderator</b></p> <p>John Bacon</p>
<p>3:10 – 3:15 PM closing remarks</p>		
<p>3:15 – 4:00 PM BeHealthy organizers packing</p>		