COMMUNITY SOLUTIONS ADVISORY SERVICE
YEAR IN REVIEW

Delivered by Open North

MAY 2020

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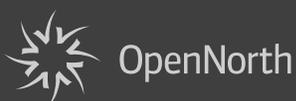
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About the
Advisory Service

Our Mandate Across Canada

In the fall of 2018, the Government of Canada announced that Evergreen was selected to receive up to $4.6 million in funding over two years from the Smart Cities Community Support Program to implement the Community Solutions Network. The Network supports communities to advance their thinking on the use of smart cities approaches to help improve the lives of their residents. As the project lead, Evergreen is working with OpenNorth and other partners to provide valuable information, learning opportunities, advisory and capacity building services to Canadian communities. Key areas include smart technologies, data ownership, data management, privacy and security.

As Evergreen's lead technical partner, Open North offers the Advisory Service (AS). Our mandate is to build the capacity of Canadian public servants (elected officials, senior managers, and technical leads) within communities to develop and implement open smart cities projects.

Our Unique Product and Service Offering

The AS consists of activities that share expertise and provide guidance to communities on smart cities and related topics such as data governance and management, open procurement, privacy, digital literacy, public engagement in technology infrastructure procurement, and open data standards. These activities include a curriculum of 19 highly interactive online courses, 10 step-by-step implementation guidelines, 6 webinars, participatory workshops and training, four community case studies on the Open Smart City (OSC) experience across Canada, and personalized smart city support by leading experts across Canada. At no cost, the AS offers participating communities a personalized, locally-relevant, Open Smart City learning experience.

A Word from the Executive Director

Since it was founded 9 years ago, Open North has supported communities across Canada become more open, smart, and innovative in how they use data and technologies. Open North's role as technical lead of the Community Solutions Advisory Service has allowed us to reach public officials on an unprecedented scale, and build a community of practitioners that truly believe in technology for the betterment of their villages, towns, and cities.

Our achievements in the first year at the helm of the Advisory Service have built a strong foundation to help communities address new challenges to meet the needs of 2020 and beyond, from considering privacy concerns around COVID-19 tracking, to using technology-driven decision making tools to address climate change. Many of the technological challenges faced by communities that we uncovered in this first year will likely be exacerbated by the ongoing pandemic. The scale of the challenges posed by COVID-19 are going to require immense resources, a heavy burden that will fall on the shoulders of municipal staff.

The Advisory Service and Open North remain committed to helping ease that burden, and helping communities toward becoming Open Smart Cities from 2020 to 2022 and beyond.

Jean-Noé Landry
Executive Director, Open North

Executive Summary

The disruption created by the use of new technologies in urban settings has triggered new challenges and opportunities for Canadian communities. Enabling the right cultural, policy, organizational, and technical environment in public administrations is essential for the adoption of a values-based approach to the development of smart cities. This is why Canadian municipalities must address their current internal knowledge and skill gaps as they relate to the use of digital innovation for the common good, and bring about necessary changes in municipal practices and processes.

What a difference a year can make

Launched in December 2018 thanks to the financial support of Infrastructure Canada, the federal agency leading the Smart Cities Challenge, the Community Solutions Network's Advisory Service has shown to be an important partner in building OSC knowledge and skills among public servants in communities of all sizes across Canada. Some highlights of our achievements over the past year include:

> Garnering unique insights into the OSC capacity level of Canadian communities, their challenges, needs, and priorities and helping communities frame their smart city challenges in an OSC way.

> Increasing OSC awareness, knowledge and skills of public servants across Canada.

> Becoming a national convener for knowledge-sharing and exchange of learning within the OSC municipal landscape.

As we reflect on the first year of our Advisory Service, we set our sights on the future

Just as the needs of the communities we work with evolve, so does the AS. Over the next two years, we strive to continuously improve our service offering by:

> Re-assessing needs, challenges and priorities of Canadian communities, and adapting our services in light of newly gained insights.

> Empowering communities and practitioners to integrate OSC approaches into current and future initiatives to tackle their most pressing challenges.

> Fostering a pan-Canadian dialogue that includes all levels of government, industry partners, and community stakeholders.
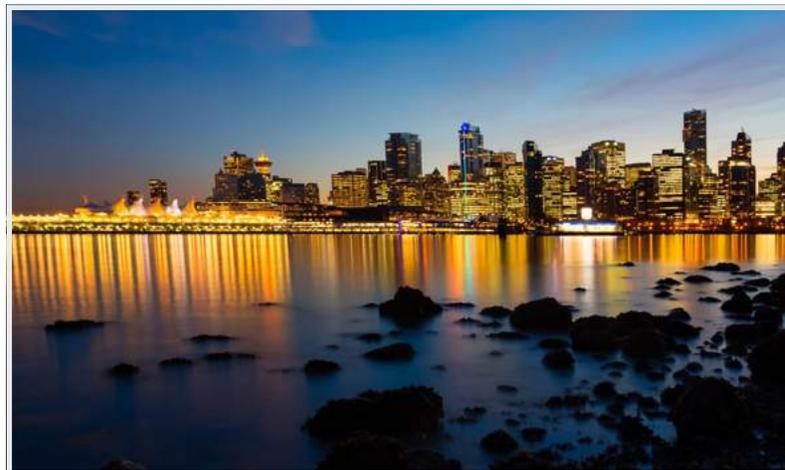
Common Open Smart City Needs Across Canada

The success of the open data movement and the potential of smart city technologies has led to an increased interest in Open Smart Cities across Canada. In November 2019, the AS released its first **State of Open Smart Communities in Canada** report. This report, produced at the halfway point of the CSN's first year of operation, provides the results of the self-expressed needs and strengths of communities in Canada, and a glimpse into the latest municipal thinking around Open Smart Cities in Canada. Through the completion of what may be one of the most detailed smart city assessments in the Canadian municipal landscape, the AS has gained unique insights into the needs and challenges communities face across all stages of their OSC development.

Communities at similar stages expressed similar needs, setting the stage for collaboration across communities and a more targeted, efficient future AS. Those needs include:

For communities at an early stage of smart city development

> Building a foundational understanding of the risks of introducing technologies in their community, such as those pertaining to privacy and security.

> Connecting with and learn from the successes and mistakes of other communities with similar aspirations.

For communities at intermediate to advanced stages of smart city development

> Conferring with peer cities to learn from their mutual approaches and challenges, such as exploring the development of technologies not readily seen in other Canadian communities such as 5G and closed-circuit television (CCTV).

> Ensuring that issues such as consent and security are integrated into technology procurement.

> Learning from peers to develop new policies at the local level, given the absence of regulation and limited information regarding such technologies.

Being attuned to community needs has allowed us to provide them with support which directly aligns with their priorities, and to plan a future AS rooted in meeting those needs.

Advisory Service Impact

Across Canada, our integrated service offering of courses, workshops, webinars, and in-person consulting has empowered communities and public servants to adopt OSC approaches. In our first year, we have:

> raised **awareness** of OSC approaches across a diverse range of municipal staff, with positive engagement and a desire to continue to strengthen learning;

> increased **knowledge** on OSC topics of 85 municipal staff participants by an average of 20%; and

> increased municipal staff participants' OSC **skills**, thereby building the capacity to positively influence ongoing municipal initiatives.

Awareness

Raising awareness of the OSC approach is rooted in showing public servants that there is an alternative, more open, and more equitable way of implementing smart city projects, programs and policies. Across all services provided we reached 250 people, the majority of whom are staff in Canadian municipalities. The material we offered through our service offering raised awareness to varying degrees, according to the audience they were targeting:

Webinars were developed for a broader audience, and so they built a general awareness of open smart cities, with AS experts presenting introductory content on fundamental OSC topics.

Courses were tailored to public servants, who gained awareness across all OSC domain areas, providing more depth into specific topics in data governance, engagement, and procurement.

Workshops raised awareness in diverse cross-departmental groups, many of whom had no other contact or introduction to OSC approaches.

(Advisory
Service Impact)

Knowledge

Post-intervention surveys and other interactions gave us strong indications of public servants learning the OSC principles and domains, and its related approaches. Describing what they learned through their participation in the AS, one respondent said they saw "increased knowledge about setting up open data and municipal data advisory and governance structures", while another said that they have a "greater understanding of the options around digital resident engagement". These testimonies are reflected further in the average knowledge growth of 20% across all OSC domain areas, as self-assessed by the participants as a result of the courses, workshops, and advisory time participation.

Collaboratively conducting a neutral market assessment in Bridgewater, NS

The winners of the Smart City Challenge $5 million prize collaborated with the AS to better structure a technical request for proposal (RFP), assess the total cost of software and hardware ownership, and to position themselves more strategically to procure goods with a sourcing strategy that was adapted to their needs. To do this, the AS conducted a neutral market assessment with them to provide a robust deliverable in addition to teaching an OSC approach to procurement.

We're impressed with what you've provided us in such a short time. The recommendations you've presented here on taking a best value sourcing approach are some of the most concrete and useful advice we've had in a long time, and we really appreciate your work.

- Director Information Technology Municipal Joint Services Board, Lunenburg Region

(Advisory Service Impact)

Skills

Public servants in several communities are implementing OSC approaches in their work, a promising development hinting that the knowledge and skills they have acquired have initiated actionable change at the municipal level. A positive trend observed is that communities who engaged with the AS across multiple services had greater knowledge of OSC approaches, and stronger capacity to integrate them into their ongoing smart city plans. One participant, a municipal IT director, noted that "one important outcome [of taking the courses] for our community is that we are now working on a central smart cities policy to govern our operations - this will be heavily informed by the principles and broad strokes of knowledge we gained from the training". Other communities engaged across multiple services, such as Bridgewater (NS), Kelowna (BC) and Saskatoon (SK) likewise expressed how our service has improved their smart city project implementation by training them on topics such as privacy and technology procurement.

Procurement strategies for citizen engagement in Saskatoon, SK

Each component of our program is having lasting effects on the City of Saskatoon's IT infrastructure, procurement and citizen engagement processes, and broader progress towards adopting OSC approaches.

> The courses allowed municipal staff to learn about and plan for an appropriate data governance framework as it implements IT systems as part of a smart city strategy.

> The workshop delivered by Bianca Wylie (AS leading expert advisor) on the other hand, helped the City recognize the need for additional capacity-building on public engagement, and think about how to integrate public engagement in its IT procurement process.

How data crosses over in all departments and the coordination is critical, as well as the importance of engaging with the public to better identify how technology and data can improve their quality of life.

- Team leader / Manager, City of Saskatoon

Becoming an Open Smart City Convenor

The first iteration of the AS was focused on building new connections, introducing public servants and 12 leading experts (advisors and partners) to our AS, and sparking OSC conversations at a local level across Canada. Through on-going interactions with participating communities, we created a hub of knowledge and recommended practices to share and leverage across our own AS, other communities and experts.

As a national convener for knowledge-sharing and exchange of learning within the OSC landscape, the AS created favorable circumstances for incremental innovations to take place at the local level. We have, among other things:

> Engaged with OSC champions, individuals committed to propelling their municipality's OSC development.

> Created opportunities for OSC champions to connect with municipal employees from different departments to learn, exchange, and build a collective understanding around OSC-related issues and practices.

> Created a momentum within and between communities for the dissemination of innovative solutions to higher levels of government.

> Developed and strengthened relationships between the AS and 12 leading experts, with a focus on partner-community engagement on topics ranging from data governance to open procurement and public engagement.

> Enabled municipal governments to signal their most pressing needs to leading experts and start addressing these through various types of activities.

The AS has proven to be a strong, cohesive force on which communities and groups of municipalities can rely for the advancement of their OSC initiatives. In the coming years,

Municipal mobilization for open procurement in Quebec municipalities

As the concept of smart city is emerging as a powerful tool in applying technology to address urban challenges and increase the efficiency of municipal governments, procurement challenges are increasing. Given that the lack of capacity adapted to the new realities creates a deficiency in the management of procurement practices, the Advisory Service team developed and provided participating Quebec municipalities with:

> A dozen standardized tools that they can now use and adapt to their local realities, and apply to the acquisition of goods and services.

> Opportunities to strengthen and harmonize the procurement practices between their procurement and IT services.

"The tools provided during the workshop can easily be applied to our contexts. Our reality is very similar to that of other municipalities, which contributed to the strength of the group.

- Technical lead, City of Trois-Rivières

we will bolster a culture of change, bring about continuous improvement and innovation in Canadian municipalities, and nourish a pan-Canadian dialogue not only within and between communities, but also across sectors to advance new Open Smart City approaches to longstanding urban challenges.

Acknowledgements

Contribution to the Advisory Service

(Acknowledgements)

Participation in the Advisory Service

Kelowna, BC

Cochrane, AB

Saskatoon, SK

Saugeen Shores, ON

Durham, ON

Midland, ON
Innisfil, ON

Toronto, ON
Hamilton, ON
Guelph, ON

Québec, QC
Longueuil, QC

Plessisville, QC

Trois-Rivières, QC

Montréal, QC
Laval, QC

Dieppe, NB

Fredericton, NB

Bridgewater, NS