A SMART APPROACH to Building Stronger Communities
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Defining a “Smart Community”</td>
<td>4</td>
</tr>
<tr>
<td>Becoming a Smart Community</td>
<td>5</td>
</tr>
<tr>
<td>Starting your Smart Community Journey</td>
<td>7</td>
</tr>
<tr>
<td>Pursuing the Smart Cities Challenge</td>
<td>9</td>
</tr>
<tr>
<td>Smart Cities Team</td>
<td>10</td>
</tr>
</tbody>
</table>
INTRODUCTION

In Budget 2017, the Government of Canada announced that it will provide Infrastructure Canada with $300 million over 11 years to launch a Smart Cities Challenge Fund (Fund). The purpose of the Fund, modeled after similar initiatives in the United States, is to encourage communities to explore and invest in creative new approaches to solving socio-economic issues (i.e. determinants of health) identified by their community.

In this sense, the Fund is unique. Unlike other government programs, which generally award funding to reflect federal priorities, this new fund is a chance for communities to pursue innovative approaches to their own local priorities – identified by them.

Infrastructure Canada is expected to release the eligibility criteria for the merit-based competition process this Fall, but the department has already released the value of each award:

- One prize of $50 million for a large community
- Two prizes of $10 million for mid-sized communities
- One prize of $5 million for a small community
- One prize of $5 million available for an Indigenous community

As a community, it can be challenging to attract financial support (and political buy-in) for new initiatives, particularly if they are unproven. Increasingly, communities are facing competing demands to spur economic development, reduce taxes, provide more and better services, and improve quality of life. Even an innovative, successful approach to address any of these challenges might prove a tough sell.

Municipalities must take some risks in order to succeed. Recognizing this, the Smart Cities Challenge Fund is focused on rewarding those communities driven to take smart risks to improve the socio-economic outcomes for their residents.
DEFINING A “SMART COMMUNITY”

There is no standard definition of what makes a community “Smart” but most agree that a “Smart” community is one that uses technology and data to improve livability and opportunities for the community and its residents (i.e. to improve its social/human capital). In placing the Smart Cities Challenge with the department of Infrastructure and Communities, the federal government is thinking of Smart Communities in terms of how infrastructure (physical, digital, and social) can positively impact communities and the lives of its citizens.

This use of data and technology is driven by a platform referred to as the “Internet of Things” (IoT) – essentially, machines speaking with machines. From a community perspective, IoT has the potential to:

- Improve aspects of operations important to a community’s economic vitality, safety, environmental footprint, and quality of life, among others
- Respond to the community’s changing needs more rapidly and efficiently
- Engage the community and enable informed understanding and social license
- Enable collaboration across communities on best practices and lessons learned
Communities across the United States, Europe, and Australia have begun adopting Smart approaches to improving their economic, social, and health-related challenges. Now the Government of Canada wants to see Canadian communities of all sizes adopt the same approach.

Becoming a Smart Community is not only about having an idea, but understanding how that idea can address a problem. StrategyCorp has been highly engaged with Canadian municipalities of many sizes over the years. We have worked with communities to develop strategic plans, identify their service priorities, and grow their communities. Our municipal engagement has informed our understanding of the complex issues facing communities – and it is many of these cross-cutting challenges that the Smart Cities Challenge Fund is meant to address. These challenges include:

1. **Gaps in service delivery (health, mental health, social services, etc.):**

   Communities, regardless of size, are increasingly dealing with issues related to mental health, homelessness, housing affordability challenges, substance abuse, and other social problems. This is made harder when there are gaps in provincial services, or provinces download services to local municipalities. Communities have finite resources to respond effectively to challenges affecting their residents.

2. **Economic development:**

   Communities are well-aware that they need to become more active in addressing their own economic development interests, occupying the role of the convener of local economic development partnerships. For communities, the future also means attracting talent in a globally competitive marketplace, and that to do this requires building livable and connected communities.

3. **Cost of government:**

   Communities are under increasing pressure to improve service delivery all while limiting the size and cost of government. Using conventional cost-
saving and productivity-enhancing initiatives as strategies to deliver the expectations of residents have been largely exhausted. New approaches, fueled by better data and insights, will become increasingly important strategies for communities to deploy.

Streamlining Utilities
Milton Keynes, UK

**Issue:** Environmental impact of urbanization

**Solution:** Created a data hub to collate satellite, social economic, crowdsourcing, and social media data to create and implement measurable efficiencies in city services (utilities use, water consumption, transport data, etc.).

4. Public engagement:

Communities recognize that there is an increasing expectation from residents, enabled by digital technologies, to be actively involved in local decision-making and to be almost instantaneously responsive to service requests. This is often a challenge to communities that are still using old ways and old technologies to make decisions and provide customer service.

Combatting Homelessness
San Francisco, CA

**Issue:** Homelessness

**Solution:** Created the Navigation Center allowing for agency and partner collaboration, data collection and pooling to enhance the placement and housing of the 550 clients transitioning back into stable housing.

5. Climate change adaptation/mitigation:

As recent events across North America have demonstrated, climate change is not an abstract scientific concept. Already burdened with aging infrastructure and stretched emergency services, municipalities face the realities of climate change every time there is an adverse weather event.

Improving Air Quality
Barcelona, ES

**Issue:** High number of deaths related to air pollution

**Solution:** Leveraged data, social innovation, smart services, innovation clusters, and sustainable growth practices to mitigate the environmental footprint of car and transit traffic.

6. Smart sharing economy:

Dropbike is Canada’s first and only smart bike sharing service, which also became the first to launch in partnership with a North American city. The transportation data provided by Dropbike’s service to urban centres contributes to their investment in future infrastructure, as well as their long-term trajectory in becoming smart cities. For example, in a formal partnership, Dropbike shares relevant (anonymized) traffic, cycling, and aggregate customer demographic data that helps partners and cities make better decisions about where to grow infrastructure, such as parking or bike lanes. Furthermore, Dropbike’s GPS technology can identify which
bicycles were subject to theft and at which location(s). The company can then share this data with law enforcement officials should they find it useful for improving security within those areas.

Each of the challenges identified above would benefit from Smart approaches or solutions. Whether facilitating traffic flow, connecting citizens to municipal services, addressing labour market development, building social cohesion, reducing crime, or streamlining administration, Smart approaches or solutions have tremendous capacity to improve social and human capital.

Canadian municipalities also have tremendous capacity to do the same, even if administrators are constrained by finances, resources, or politics. Pursuing a Smart pathway can appear high risk, but in reality, it is a down payment on a better quality of life and a better, more efficient government. It does not need to be about increasing the costs of doing business. The case studies throughout this document illustrate what cities in other countries – facing similar challenges – have managed to achieve.

The question then is – how does a community take advantage of the Smart Cities Challenge Fund? What steps does a community need to take to prioritize opportunities, capture federal support, and deliver innovation through real time, sophisticated tools of local empowerment and efficiency?

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**STARTING YOUR SMART COMMUNITY JOURNEY**

**STEP 1:** Engage the community to define the vision

The Government of Canada wants to reward those communities that identify Smart solutions to real local challenges. The first step a community needs to take is to engage their residents in a conversation on what “Smart” will mean for their community. There is no one size fits all – elected officials, staff, and residents need to work together to set out a shared vision for “Smart”.

*This process involves understanding local strengths and weaknesses, and prioritizing local opportunities and challenges to be the focus of smart approaches and solutions.*
A community will not become Smart overnight. Choosing too many priorities dilutes success and drains resources. Set the path by establishing clear, achievable initiatives where the variables are within the community's control.

*Starting small and achieving success early on will build community confidence in further investments required to achieve a shared Smart vision.*

With a clear, strategic initiative in hand, the next step is to understand and map the policy, legislative, administrative, and partnership levers that can/need to be pulled to drive change. This may include changes to procurement policies to facilitate innovation, or putting in place collaborative governance and/or management structures (council, staff, residents) to move a project forward. Partnerships are both external (business, NGOs, academia, etc.) and internal (cutting across municipal departmental silos), and the partners must contribute real resources to the initiative, and they must be empowered to play their role in the initiative.

*Building buy-in across levels of government and among stakeholders and residents can create champions to advance what could be – and should be – shared Smart priorities.*

Smart solutions require measurable results. Even if you have achieved social change, it will not help if it cannot be proven. Success starts with understanding how you are going to measure the progress and impact of a Smart community initiative. Will you measure any or all of availability, accessibility, efficiency, resilience, or quality related to your initiative? Setting clear objectives and measures to track progress against those objectives is essential; it is equally essential that progress be transparently reported to all stakeholders.

*Ultimately, to position your community for success in the Smart Cities Challenge, understand how to measure progress and setbacks, and how to report on your Smart investment.*

The Smart Cities Challenge is not a typical funding application. It is not checking boxes or filling out forms. Each pitch is evaluated by a jury and awarded based on its ambition, creativity, and most importantly – community support. Keep that in mind throughout. After all, this is your Smart Community.

*The old ways of applying need not apply.*
PURSUING THE SMART CITIES CHALLENGE

The federal government’s Smart Cities Challenge is an immediate opportunity to catalyze communities to pursue Smart approaches and solutions. Regardless though, continued technological, socio-economic, and environmental disruption will eventually push all communities to become Smart.

The Smart Cities Challenge is seeking to support communities that are looking to use technology and data to successfully address complex social, economic, and environmental challenges. Improving economic and social outcomes is increasingly driving the demands of local government. It will not stop. The challenge, therefore, is to be a community unafraid of innovating and trying new approaches to old problems; embrace opportunities to be first.

Of course, the effort to develop a winning submission to the Smart Cities Challenge may not prove successful. There will be many creative proposals and a limited number of winners. However, as with bids for major tournaments or competitions for national recognition, communities can benefit from the process, regardless of the results of the competition.

Experience with programs like this in the US and UK have left a legacy of collaboration and a revitalized vision of the future of their communities, even when the bids were unsuccessful. A number of US municipalities have gone on to implement their strategies, even without the incentive of a government grant or national recognition. Why? The plans, and the process of developing them, ignited a new enthusiasm in the community and beyond creating “a community with its act together”. They have attracted financial support from other sources and support from those excited by the vision elaborated in the Smart Cities proposals.

We believe that by following the five-step process set out in this paper, your community can begin to set out its own path to becoming a Smart community; one that improves the lives of residents and retains and attracts new business, talent, and investment.
StrategyCorp, and its Municipal Practice, is committed to the ongoing success of Canada’s communities. As the Government begins unveiling more details of the Smart Cities Challenge, we encourage you to speak with Chris Loreto about helping you design your pathway to becoming Smart – and to assess whether competing under the Smart Cities Challenge is the right move for your community.

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