



**SMART CITIES
NIAGARA**

Smart Cities Niagara Overview

Smarter Niagara Steering Committee
August 29, 2019

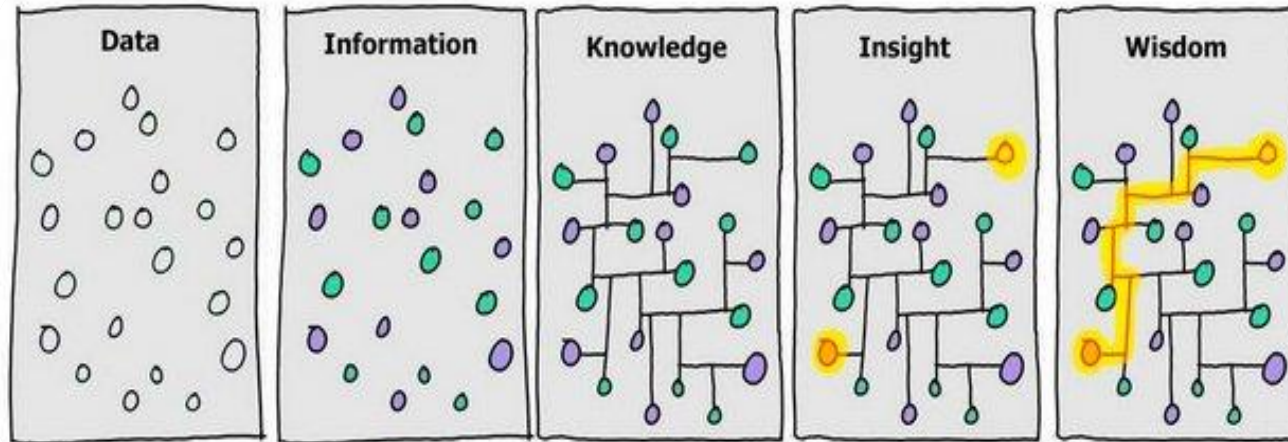
Agenda

- What is a Smart City
- Niagara's Smart Cities Challenge Application
 - Engagement
 - Sense of Belonging
 - Strategic Alignment
 - Leveraging Data & Technology
- Additional Information



What is a Smart City?

- Smart cities use data and technology to create ***efficiencies***, improve ***sustainability***, create ***economic development***, and ***enhance quality of life*** factors for people living and working in the city.

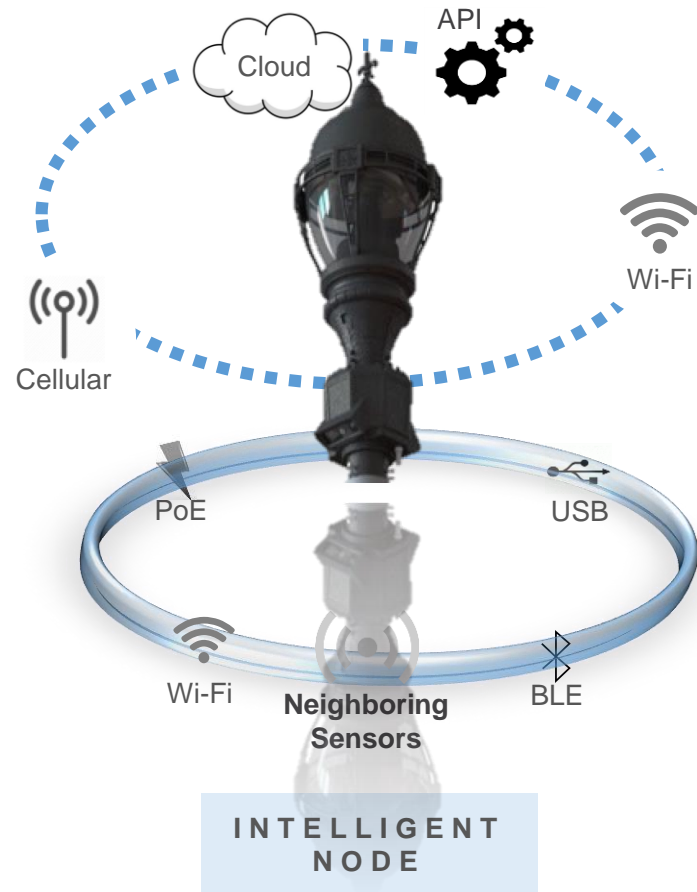


What is a Smart City?

Smart City Enablers...

- Real-time Data Analytics
- Cloud computing
- IoT (Internet of Things – e.g. sensors)
- Broadband / Narrowband (LPWAN)
- M2M Secure Communications
- Collaboration / Engagement
- Digital Literacy

Smart Cities Example



REAL-TIME & HISTORICAL

- Traffic
- Parking
- Pedestrian
- Media
- Environmental
- Other

DEVELOPERS

- Partners
- SIs
- Entrepreneurs
- Incubators
- High School
- College
- Hackathons
- Etc.

APPLICATIONS

REFERENCE APPS

ParkingView CitySight TrafficPulse

About the Challenge

The screenshot shows the top navigation bar of the Infrastructure Canada website. It includes the Government of Canada logo and name in both English and French, the Canada.ca website address, and links for Services, Departments, and Français. The main header features the text "Infrastructure Canada" and the "Canada" logo. A search bar is located on the right side of the header. Below the header is a navigation menu with links for "The Minister", "Investing in Canada Plan", "Portfolio", "Bridges", and "All Investments Since 2002". The breadcrumb trail reads "Home > Investing in Canada Plan > Smart Cities Challenge". The main content area is titled "Smart Cities Challenge" and features a large banner image. The banner image shows a busy city street with people walking and a large red maple leaf in the background. The text "SMART CITIES CHALLENGE" is overlaid on the image in large white letters. The hashtag "#smartcitiesCanada" is visible in the bottom right corner of the banner.

Government of Canada / Gouvernement du Canada

Canada.ca | Services | Departments | Français

Infrastructure Canada

Canada

Search

The Minister | Investing in Canada Plan | Portfolio | Bridges | All Investments Since 2002

Home > Investing in Canada Plan > Smart Cities Challenge

Smart Cities Challenge

SMART CITIES CHALLENGE

#smartcitiesCanada



About the Challenge

PRIZES TO BE WON:

1 PRIZE:
UP TO \$50M
OPEN TO ALL
COMMUNITIES

2 PRIZES:
UP TO \$10M^{EA.}
OPEN TO COMMUNITIES
UNDER 500,000 PPL

1 PRIZE:
UP TO \$5M
OPEN TO COMMUNITIES
UNDER 30,000 PPL

Collaborative Application

Municipal Partners



Collaborative Application

Community Partners



SMART CITIES
NIAGARA

Engagement

7 Open Community Meetings

- Brock University x2, Niagara College, Four Points Sheraton, St. Catharines Central Library, NOTL Community Center, Ridgeway Farmer's Market

10 Stakeholder Meetings

- Representation from Municipal and Community partners

2 Online Surveys

- Over 400 responses: results released on the NiagaraOpenData.ca

Social Media

- 225,000+ Social media interactions (Twitter, Facebook, Website)

Brock University Students

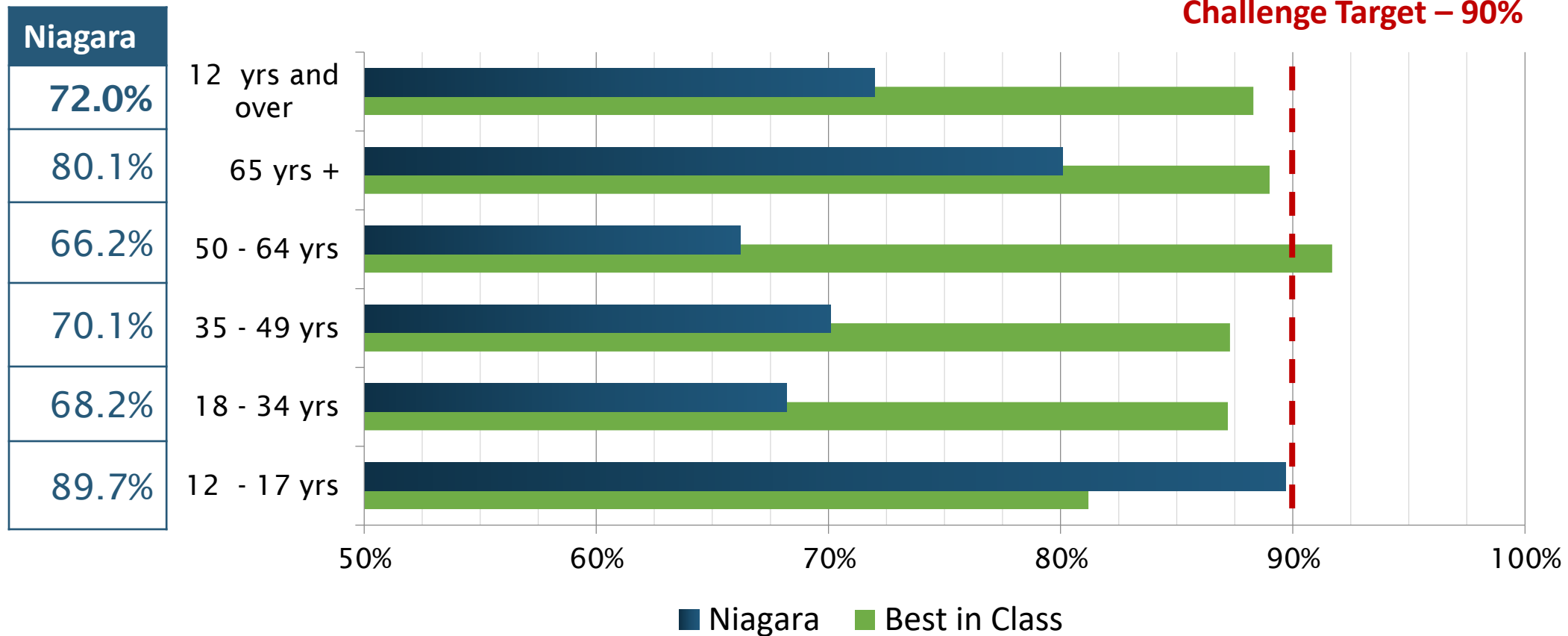
- 100 Brock University MBA Student papers specifically on the Niagara Smart Cities Challenge



**SMART CITIES
NIAGARA**

Sense of Belonging

Life Course Model

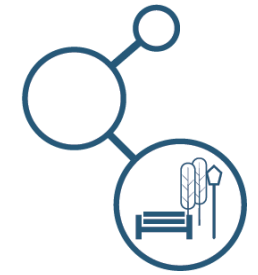


Labrador-Grenfell Regional Integrated Health Authority, Newfoundland and Labrador

Source: Statistics Canada. Table 105-0508 - Canadian health characteristics, annual estimates, by age group and sex, Canada (excluding territories) and provinces, occasional (number unless otherwise noted), CANSIM (database),

Why Sense of Belonging

Affecting Factors



Economic Inclusion

- Skill Gap
- Wage Equality and Distribution
- Household Income
- Youth Employment Rate

Safety & Security

- Crime Rates
- Crime Severity Index
- Falls

Housing

- Low Income Cut-offs
- Shelter Visits /Length of stay

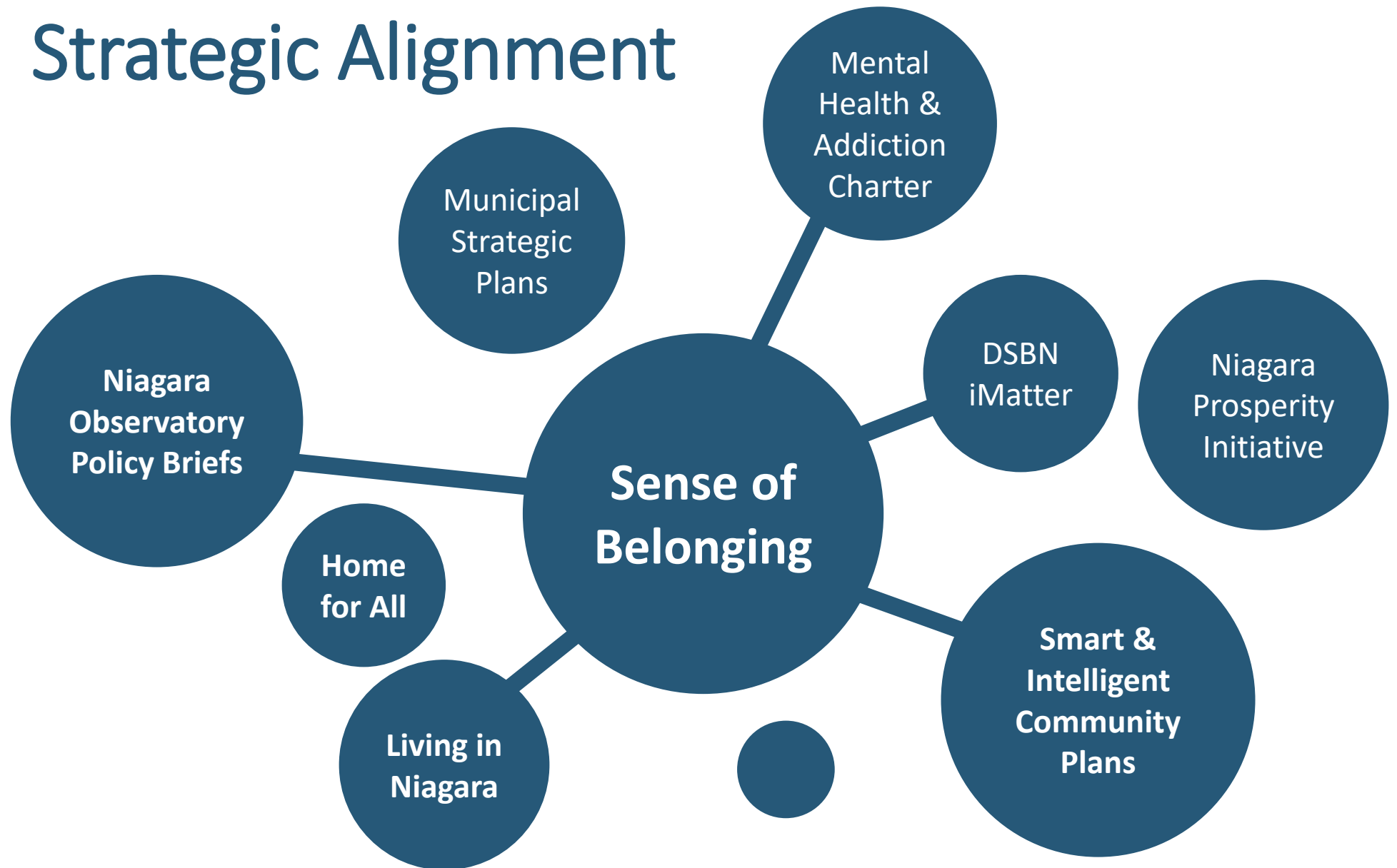
Family / School

- Educational Attainment
- Number of Friends/Contact
- Substance Abuse

Public Space

- Connectivity
- Walkability/Accessibility

Strategic Alignment



Leveraging Data and Technology

Reimagined connectivity hubs that enable participation by all

- Creation of connected Community Shelters/Benches/Kiosks
- Expand the role of libraries
- Design roving mobile hubs
- Plan Niagara iInnovation Neighborhoods
- Develop augmented reality app to connect people with the history of Niagara

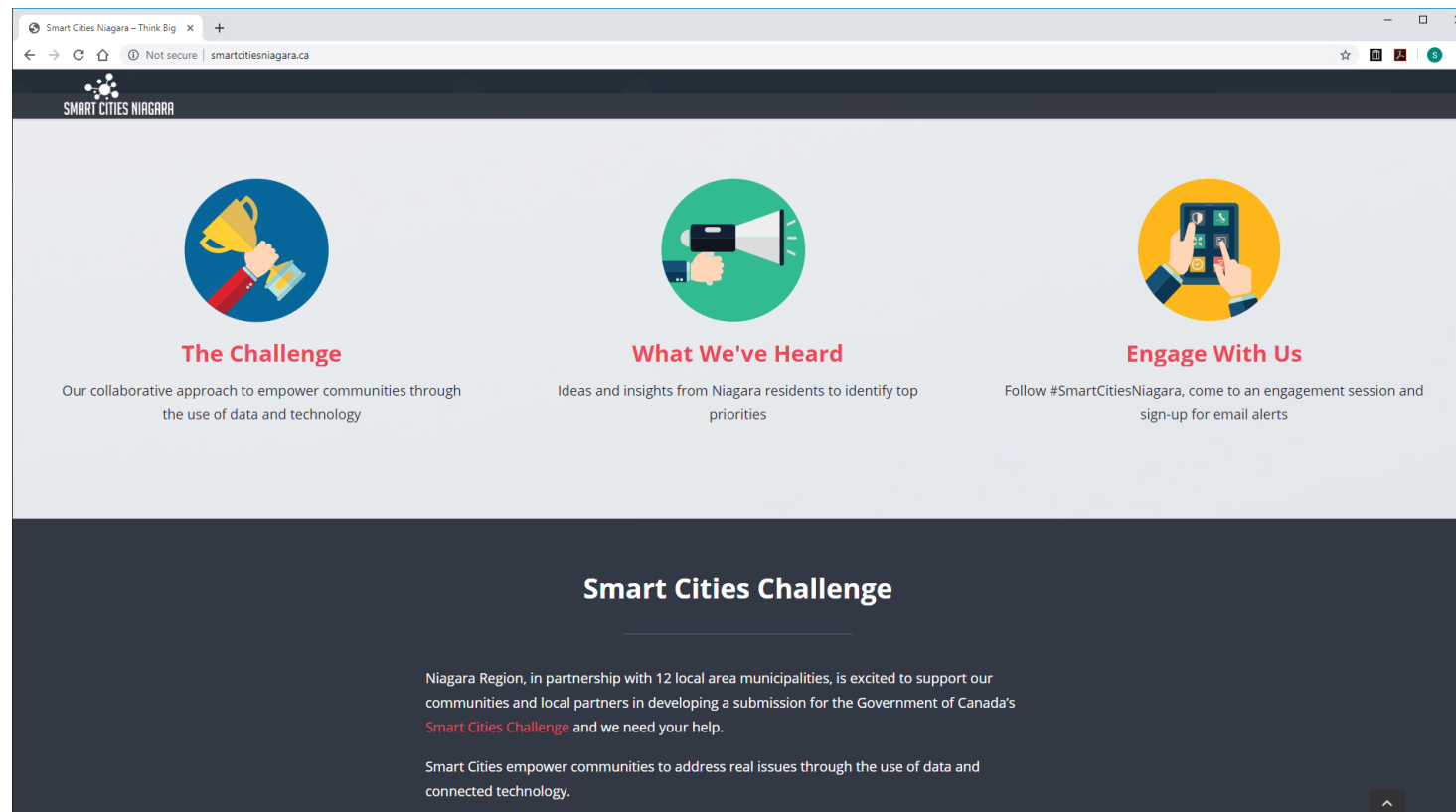
A digital ecosystem that makes 'invisible' members of society visible

- Leverage Artificial Intelligence to connect people to employment, volunteering, mentoring and recreation opportunities.
- Implement a Digital Identity model in partnership with federal and provincial initiatives.



Additional Information

<http://smartcitiesniagara.ca/>



Smart Cities and Communities (SCC)

Community Value Created...

	Type	Value proposition
Sustainable Urban Mobility	<i>Real-time road user information</i>	Enable people to take informed decisions about their mobility, saving time and energy.
	<i>ITS-based enhancements of public transport</i>	Reduce waiting time as well as emissions, and facilitate intermodal commuting.
	<i>ITS for traffic monitoring, management and enforcement</i>	Optimise fleet management and route scheduling.
Sustainable Districts & Built Environment	<i>Smart technologies for the built environment</i>	Pursue better living, resource efficiency and waste reduction.
	<i>Sustainable districts</i>	Reduce emissions and resource consumption by embedding integrated energy efficiency technologies.
	<i>Place making</i>	Create communities of interest that can be key to support integrated SCC solutions.
Integrated Infrastructure & Processes	<i>Smart City Platforms</i>	Allows real time monitoring and preventive steering of cities.
	<i>Intelligent City Services</i>	Co-ownership of local matters and outcomes. Efficiency savings for city administrations. Stimulate involvement at local level.
	<i>Smart grids</i>	Collected information and insights may serve planners and managers, but are often also shared with users, who can take more informed decisions and can also become <i>prosumers</i> , i.e. users that can switch from being energy consumers to becoming producers based on the circumstances.