Global Network for Health in All Policies

Social Inequalities in Health: Understanding and Engaging Differently
Social Inequalities in Health: Understanding and Engaging Differently
Québec City

- Over 530,000 residents
- Total area: 454.28 km²
- A UNESCO World Heritage Site
- Economic prosperity
- Affordable education
- Outdoor activities, cultural and athletic events
Smart Cities Challenge

Background

• Launched in 2017 and organized by Infrastructure Canada

• The Smart Cities Challenge is a pan-Canadian competition open to communities of all sizes:
  • Municipalities
  • Local and regional governments
  • Indigenous communities

Source: Infrastructure Canada
Objective

To empower communities to adopt a smart cities approach to improve the lives of their residents through innovation, data, and connected technology.
Smart Cities Challenge

Process

• Québec City: finalist in the $50 million category
• Final proposals submitted on March 5, 2019
• Four winning communities were selected:
  o $50 million: City of Montréal, QC
  o $10 million: Nunavut communities, NU, City of Guelph and Wellington County, ON
  o $5 million: Town of Bridgewater, NS
Québec City’s Project in a Single Number

8 years
Québec City – Final Proposal

Challenge statement

*Social Inequalities in Health: Understanding and Engaging Differently*

Engage the people of Québec City in a broad-based initiative to promote sustainable health and well-being for all through collective intelligence and digital monitoring and decision support tools.

Projected benefits

- Create a sustainable health ecosystem
- Obtain $50 million in financing

Partners

- Université Laval
- Partners from the healthcare and business sectors, community organizations, and Indigenous communities
A broad-based initiative for sustainable health and urban safety backed by scientific research and technological innovation that drives economic development and enhances the vitality of the Québec City region.
Québec City – Activities

Support for the project and sustainable health

PULSAR
A collaborative platform for sustainable health research and innovation
https://pulsar.ca/en/home

Digital Twin
High definition 3D rendering of the city
• LIDAR 3D scanning tools
• Mobile capture unit with geolocation
• Ultra HD camera
Québec City – Activities

Housing/Local, physical, and social environment

Heat islands
Reduce heat islands and their impacts
- Fixed sensors
- Thermal imaging cameras
- Wi-Fi devices

Noise pollution
Expand quiet areas and reduce noise pollution
- Fixed sensors
- Sound level meters
- Wi-Fi devices
Local, Physical, and Social Environment

Relais des mobilités (Mobility Lab)
Outdoor semi-controlled trial area for people with functional limitations
  • Sensors
  • Video and motion-analysis systems
  • Street furniture and accessories equipped with Wi-Fi devices
  • Development room (3D printers, laser cutters)

MobiliSIG
Assistive technology to facilitate multimodal mobility
  • Geographic information system (GIS) database
  • Power to calculate and cross-reference PULSAR data
Access to services

Citizen Portal
Digital transactional space to facilitate dialogue and access to services
• Authenti-Cité federated authentication system
• Progressive Web app (PWA) and Web design

Location-based citizen communication app
A location-based discussion platform designed as a shared solution for citizen communication and engagement
• Space Pulse, the location-based social networking app for citizen communications
Québec City – Activities

Food security
ÉQUITO
Improve the quality of and access to food
  • Applications and websites
  • Technology to measure, control, and monitor products

Recreation
Culture guide
Digital passport offered to all newborns, combined with cultural activities offered starting in early childhood
  • Citizen e-services
Québec City – Project Cost

COÛTS DU PROJET

<table>
<thead>
<tr>
<th>COÛT TOTAL DES ACTIVITÉS</th>
<th>BUDGET D’INITIATIVES CITOYENNES</th>
<th>GESTION DE PROJET</th>
<th>GESTION DES RISQUES</th>
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<tbody>
<tr>
<td>34 M $</td>
<td>3,3 M $</td>
<td>16,9 M $</td>
<td>6,6 M $</td>
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COÛT TOTAL DU PROJET: 61 M $
Committed Partners
Final Application Video