



Stronger Together

Municipal Innovation Council



MIC
municipal
innovation
council



NUCLEAR
INNOVATION
INSTITUTE

Introduction



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Smarter, stronger, more resilient communities

The Municipal Innovation Council was established in 2020 when eight municipalities in the County of Bruce came together to find savings, efficiencies and deliver services better to their residents — all with the goal of building smarter, stronger, more resilient communities.



Leveraging the Nuclear Innovation Institute



Areas of focus

Construction and Infrastructure

IT and Digital Services

Municipal Sustainability

Liveable Communities

Proven success



Added value

For every MIC dollar invested, we have been able to **double** that through external funding sources.

This brings the total value delivered by the MIC to **over \$1.25 million.**

2022 MIC highlights: a year of collective success

Waste management & information technology

Two service reviews completed

Cost to MIC members:

\$0

IT Service review

Collective cost savings identified:

\$585k

Mapping solution that provides a digital twin of Bruce County

Collective cost savings:

\$500k

Project partners



A Municipal Innovation Council Project

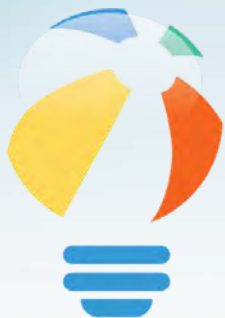


Better workplaces

230+

municipal staff trained





Smart Beach

Turning current data into safe swimming.

Learn more: SmartBeach.ca



MIC
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The MIC at work in your community.

Innovative technology and public education that saves lives!

- ▶ Automated, real-time information
- ▶ Identify where are rip currents forming
- ▶ Public education and awareness

Provides a unique service to residents, visitors and newcomers to our beaches—one that will help save lives.



Smart Beach expert: Dr. Chris Houser



“

This will be the most innovative beach safety program in the Great Lakes region and across North America.

Dr. Chris Houser
University of Windsor



University
of Windsor

”

The science behind the Smart Beach project



SENSORS

Sensors will collect weather, wave and water data, as well as rip current information



RAEON BUOY

RAEON (Real-time Aquatic Ecosystem Observation Network) Buoy



CAMERAS

Monitoring the distribution of beach users, wave information and rip current detection, with anonymized faces and no identifying information collected

*AI (artificial intelligence) - Rip current detection - Wireless communications - Remote sensing
Machine learning - Internet of Things (IoT) - Public education*

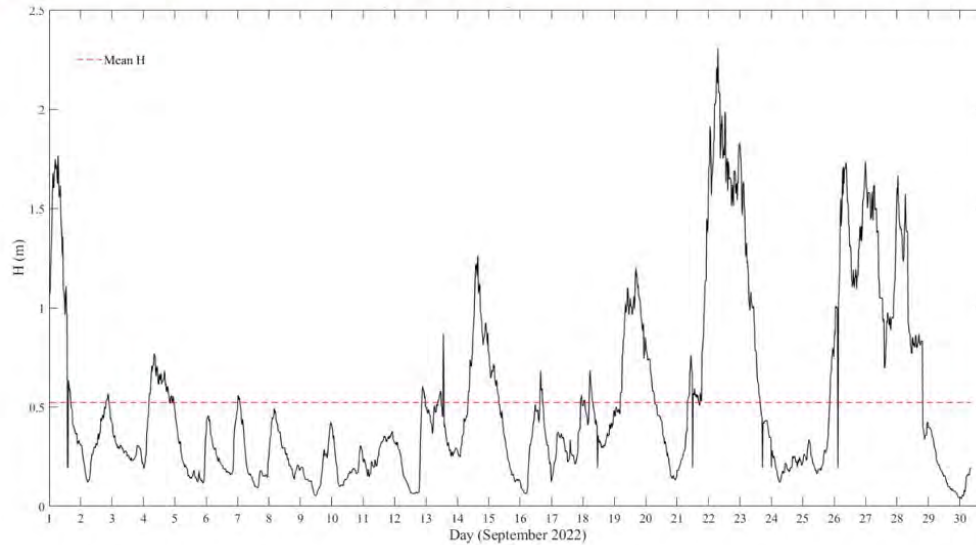
Public education and awareness



Smart Beach 2022 recap



Significant Wave Heights (H) at Station Beach, Kincardine



Smart Beach 2023

This year, the Smart Beach team will:

- ▶ Test a communication tool: real-time information on swimming conditions, warning people where hazards are at Station Beach
- ▶ Build on the Smart Beach awareness and education campaign focused on water safety
- ▶ Deploy a RAEON buoy at the same location to collect more data that will help to strengthen the model
- ▶ Install another camera system near the Kincardine Pier to collect data on the north side of the jetty
- ▶ Potentially expand the Smart Beach project to another beach in the MIC member municipalities



2023 Priority Planning - *Draft*

Municipal sustainability

Liveable communities

**Medical
professional
recruitment**

**Municipal
succession
planning**

**Waste
management**

**Municipal
labour**

**Workforce
housing**



Thank you

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