

Inter-Community Service Collaboration: Enhancing Rural Infrastructure Preparedness for Climate Change

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Resilient Communities Research Collaborative www.resilientresearch.ca

Abstract

The purpose of the research project was to 1) assess the potential of inter-community service cooperation (ICSC) as a possible tool to address the impacts of climate change (CC) in small (500-7500 pop.) Ontario rural communities south of the Sudbury region and 2) understand the extent to which such collaboration and the impacts of CC are, or could be, embedded within the community's infrastructure asset management plans and processes (AMP). In Ontario, CC is already underway and by 2050 an increase in annual average temperature between 2.5-3.7° C is projected. Projections suggest that more frequent and more intense extreme events are likely and that the risk of disruptions to infrastructure is likely to increase.

ICSC is defined as the sharing, procuring or providing of needed infrastructure services with one or more municipalities or other organizations. Research suggests that the careful use of service cooperation can contribute to cost savings and improved local service provision. Infrastructure includes the physical structures and human systems, resources and processes that support those structures, including AMP.

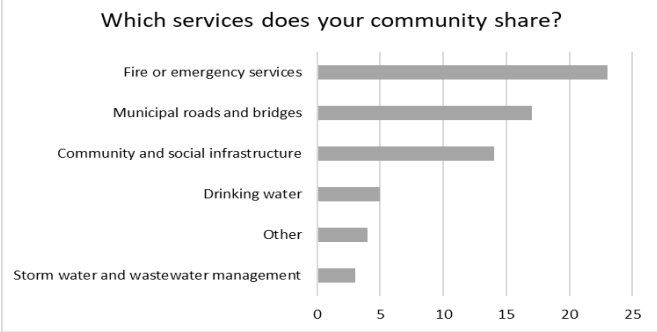
AMP is a municipal-level process undertaken to make evidence-based decisions regarding the building, operating, maintaining, renewing, replacing and disposing of infrastructure assets. Effective AMP can maximize the life cycle of infrastructure assets and provide cost efficient service delivery.

Survey Results

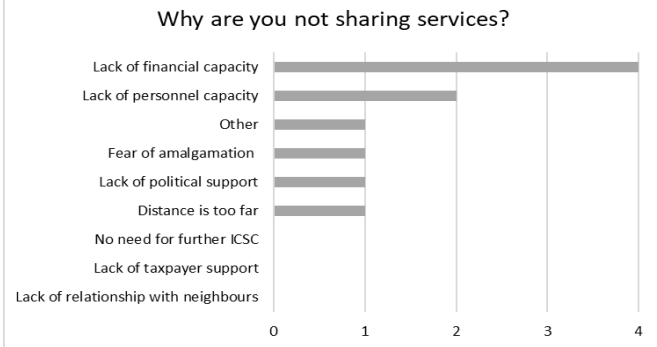
- 84% of study communities have experienced CC impacts on their infrastructure in the past 10 years.
- 94% of responding communities indicated that extreme weather or climate change will have an impact on their community's infrastructure in the next 10 years



For Communities that share services



For Communities that DO NOT share services



Case Study Results



We developed a series of best-practices tailored to communities considering cooperation with their neighbours, which include:

- Clearly identify the municipality service needs, then communicate with neighbours to assess the possibility of partnering
- Be open to sharing resources with your neighbours; all municipalities have limited resources and sharing a service might be beneficial for both jurisdictions
- Start small to build up confidence and experience; work up to bigger issues

Complete Findings & ICSC Toolkit Available
www.resilientresearch.ca
 under 'publications'

Funding & Project Partners

Research

Lit Review & Interviews

- Informed survey development and identified gaps in literature

Provincial Survey

- Sent to elected and non-elected officials in 163 communities

Case Studies

- 10 communities undertaking innovative ICSC highlighted

