Smart Cities Challenge

Community, Connectivity, and Digital Access for Suicide Prevention in Nunavut

April 24th, 2018









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Summary

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Prepared for: Smart Cities Challenge, Infrastructure Canada

The Nunavut Association of Municipalities, on behalf of 24 communities of Nunavut, and in collaboration with Pinnguaq Association, the Embrace Life Council, and the Qaujigiartiit Health Research Centre, have put together the following proposal for the Smart Cities Challenge, administered by Infrastructure Canada.

The following document contains the 10 questions outlined by the competition application along with our answers. This document will be available publicly at www.pinnguaq.com pursuant to the standards of transparency identified by the granting body.

Section 1: Applicant Information

Community Information

Question 1: Please provide the following information on your community:

Name of community: Nunavut Association of Municipalities - on behalf of 24 communities in Nunavut.

Province/Territory: Nunavut

Population: 35,944

Indigenous community: Yes

Prize Category

Question 2: Select a Prize Category (only one):

- a. 50 million
- b. 10 Million 🗸
- c. 5 Million

Section 2a: Problem Definition

Challenge Statement

Question 3: Please define your Challenge Statement in a single sentence that guides your preliminary proposal. It should describe the outcome/s you hope to achieve.

Our communities will implement protective and preventative measures to reduce the risk of suicide in Nunavut, which is ten times the national average, and increase the amount and accessibility of peer support networks, educational resources and creative outlets that promote positive Mental Health to all Nunavummiut.

Description of Outcomes

Question 4: Please describe the outcome (or outcomes) your proposal seeks to achieve by elaborating on your Challenge Statement.

Inuit Tapiriit Kanatami, a national organization that represents and advances the rights and interests of Inuit in Canada states that "the elevated rate of suicide among Inuit in Canada is the most urgent challenge facing our people and it demands a national response". In Nunavut, the suicide rate is ten times the national average. To face this crisis, The Nunavut Association of Municipalities (NAM) believes that using a smart cities approach to complement the National Inuit Prevention Strategy, and the Nunavut Suicide Preventions Strategy and Actions Plans can have a big impact in reducing the suicide rate in Nunavut. At the same time, Northwestel has committed to providing Bell Mobility service in all NU communities by 2019 which will support our proposal and approach.

As a result, the NAM is partnering with Pinnguaq Association, Embrace Life Council, and the Qaujigiartiit Health Research Centre (QHRC), with support from Northwestel to produce a decentralized digital mental health platform alongside permanent infrastructure in each of Nunavut's 24 communities. This platform will use a data and connected technology approach to increase the availability and accessibility of mental health resources and support systems like peer to peer networks, educational initiatives and creative outlets to all Nunavummiut. This includes an Inuktitut based digital literacy curriculum, improved and innovative network infrastructure, mobile applications, games, digital art

¹ Inuit Tapiriit Kanatami, National Inuit Suicide Prevention Strategy. Page 4. Accessed April 16th, 2018

therapy and permanent makerspaces that together will increase protective factors and self-help tools that will achieve the following collective goals:

- Significantly reduce the suicide rate in Nunavut
- Reduce the gap in life expectancy and mental illness between Inuit in Nunavut and residents of Southern Canada.
- Address social inequities by reducing the 'digital divide' and implement digital literacy initiatives adapted to Inuit culture
- Increase access to resources from local mental health services, including prevention, early intervention, treatment, and education
- Reinforce Inuit language and culture while boosting youth participation in digital activities
- Empower at-risk individuals to access information and make positive decisions to manage their health
- Recognize the histories of colonization and the injustices and damages imposed on several generations of Inuit through colonization, the residential school system, forced relocations, dog slaughters, and TB treatments.

The suicide rate in Nunavut is 10 times the national average, meaning that a focus on suicide prevention strategies and strong mental health platforms are high priorities for Nunavut communities. In 2013, Nunavut's chief coroner recorded 45 deaths by suicide, the highest number in any given year since the Territory was established in 1999². In 2014, there was 28 deaths by suicide in Nunavut. In 2015 the number was 33, in 2016, 32 and in 2017, 25. In January of 2018 there have already been 4 recorded deaths by suicide. Since 1999, there has been a count of 552 deaths by suicide throughout the Territory³. In October 2015, the Premier of Nunavut Peter Taptuna and Cabinet declared a suicide crisis in Nunavut.

The Embrace Life Council in Nunavut points to biopsychosocial risk factors for suicide that include mental disorders (mood disorders, schizophrenia, anxiety disorders, and other), alcohol and other substance abuse disorders, hopelessness, impulsive or aggressive tendencies, history of trauma or abuse, major physical illnesses, previous suicide attempts and family history of suicide. Environmental risk factors for suicide include job or financial loss (poverty), relational or social loss, easy access to lethal means, and local clusters of suicide that have a contagious influence. Sociocultural risk factors for

²Sarah Rogers, "For 2013, Nunavut records highest ever number of suicide deaths", Nunatsiaq News. http://nunatsiaq.com/stories/article/656742013_sees_territorys_highest_even_number_of_suicides/ Accessed April 3rd, 2018

³Nunavut Suicide Summary, from 1999 to January 2018 https://es.scribd.com/document/370356913/Suicide-by-Nunavut-community-1999-to-January-2018#from_embed

suicide include lack of social support and sense of isolation, stigma associated with help-seeking behaviour, barriers to accessing health care, especially mental health and substance abuse treatment, certain cultural and religious beliefs, and exposure to, including through the media, and influence of others who have died by suicide⁴.

Research states that the risk factors and high numbers of suicide in Inuit communities correlate with the historical trauma from colonial violence, including dispossession, culture loss, and social disconnection⁵. The Truth and Reconciliation Commission of Canada found that Residential schooling in the North and the coerced or forced relocation of Inuit played an important part in the rapid transformation and transition of the region's land-based lifestyles and economies into urban settlements between the 1950's and 1970's - a result of the assertion of federal authority in the North⁶ in the wake of rich oil and mineral findings⁷. At the same time, this forced relocation to poor government housing conditions also led and compounded the presence of TB, a solution for which involved separating families and sending diagnosed individuals onboard hospital ships, like the C.D. Howe, to sanatoriums in the South. Many families who were separated never knew where their loved ones had been taken, or when they would return, if at all⁸.

An approach to suicide prevention lies in understanding the risk factors for suicide in Inuit communities and how they add up to cause distress⁹. The Inuusivut Anninaqtuq Action Plan states that "Inuit are not predisposed by virtue of their ethnicity to be at a higher risk of suicide than non-Inuit"¹⁰; indicating that legacies of colonial violence are the root cause of social inequities that affect Inuit, such as poverty and overcrowding, where 52% of Nunavummiut live in Social Housing, 38% of which live in overcrowded conditions (up to 72% in some communities) and 80% of which make less than \$23,000 a year¹¹, which given the high cost of living in the North (higher rents, food, internet, and other basic needs) is significantly low compared to other regions in Canada. Food insecurity, a high unemployment rate (14.3%¹²), low high school graduation rates (28.5% or 210 out of 735 enrolled in Grade 12 during 2014-2015¹³), and disparities in access to health services (not just between the North and South of Canada, but also between communities in the North) also contribute to the risk factors for suicide. The National Inuit Suicide Prevention Strategy, overseen by Inuit Tapiriit Kanatami states that achieving social equity is necessary to prevent suicide¹⁴, as is strengthening protective factors.

⁴ Embrace Life Council, "Facts about Suicide: Risk and Protective Factors", Accessed on April 3rd, 2018

⁵ Kral, Michael J. <u>"Suicide and Suicide Prevention among Inuit in Canada."</u> Canadian Journal of Psychiatry. Revue Canadienne de Psychiatrie 61.11 (2016): 688–695. *PMC*. Accessed on 3 Apr. 2018.

⁶ "Canada's Residential Schools: The Inuit and Northern Experience" <u>The Final Report of the Truth and Reconciliation Commission of Canada</u>. Published for the Truth and Reconciliation Commission by McGill-Queen's University Press. 2015. Page 4-5. Accessed on April 3rd, 2018 ⁷ *Ibid*, page 75.

⁸Inuit Tapiriit Kanatami, Inuit-Specific Tuberculosis (TB) Strategy. March 2013, Page 13. Accessed April, 2018

⁹ Inuit Tapiriit Kanatami, National Inuit Suicide Prevention Strategy. Page 11. Accessed on April 5, 2018

¹⁰ Inuusivut Anninagtuq Action Plan 2017-2022. June 2017. Page 5. Accessed on April 5, 2018

¹¹Nunavut Housing Corporation's Appearance before the Standing Senate Committee on Aboriginal Peoples - March 23, 2016. Accessed on April 3, 2018

¹² Nunavut Bureau of Statistics: <u>Nunavut Quick Facts</u>. Accessed on April 3, 2018

¹³ Nunavut Bureau of Statistics: Education, Accessed on April 3, 2018

¹⁴ Inuusivut Anninagtuq Action Plan 2017-2022. June 2017. Page 8. Accessed on April 5, 2018

Several suicide prevention strategies, such as the 2016-2017 "Resiliency Within, an action plan for suicide prevention in Nunavut", and "Inuusivut Anninaqtuq Action Plan" for 2017-2022 outline a vision in which individuals, families, communities, organizations and governments work together to provide wide-reaching and meaningful services to prevent suicide and build healthy communities where children and youth can grow up in safe and nurturing environments¹⁵. The Inuusivut Anninaqtuq Action Plan takes a holistic approach that outlines 8 interrelated commitments and evidence based action items:

- 1. Take a focused and active approach.
- 2. Strengthen mental health services.
- 3. Support youth resilience.
- 4. Deliver intervention training.
- 5. Support research, monitoring and evaluation.
- 6. Communicate openly with Nunavummiut about prevention and progress.
- 7. Support early childhood development.
- 8. Support community-led action¹⁶.

Furthermore, the United for Life Stakeholder Summit for Suicide Prevention, held in Iqaluit in May 2016, yielded consensus on six priority action areas:

- 1. Community-led action and decision-making;
- 2. Transmission of Inuktitut and Inuit culture:
- 3. Early childhood development, grounded in Inuit culture;
- 4. Supports for children and youth, grounded in Inuit culture;
- 5. Healing gatherings and support groups in all communities and;
- 6. More mental health services for all ages, with a focus on involving communities and Inuit practitioners¹⁷.

Additionally, The National Inuit Suicide Prevention Strategy includes an approach to reduce major risk factors while improving major safety and protective factors based on the following six objectives:

- 1. Create social equity;
- 2. Create cultural continuity;
- 3. Nurture healthy Inuit children;
- 4. Ensure access to a continuum of mental wellness services for Inuit;
- 5. Heal unresolved trauma and grief; and,
- 6. Mobilize Inuit knowledge for resilience and suicide prevention.

¹⁵ Inuusivut Anninagtuq Action Plan 2017-2022. June 2017. Page 5. Accessed on April 5, 2018

¹⁶ *Ibid*, Page 5

¹⁷ *Ibid*, Page 5

Our proposal for implementing digital literacy initiatives as well as improving digital infrastructure for decentralized mental health resources, and enabling new creative outlets and art therapies based on data and connectivity are important protective factors that relate and aligned with the above objectives¹⁸.

Our proposal will:

- Increase social equity by reducing the digital divide through a Inuit based K-12 digital literacy curriculum, and improved and permanent network infrastructure.
- Create cultural continuity and reinforce Inuit language, culture and history, by implementing
 digital content and materials that are reflective of Inuit culture through educational and skill
 building resources that are accessible in Inuktitut
- Provide nurturing environments for youth through permanent, community-based hubs and makerspaces that support creativity, social and emotional development and connections, as well as technical and critical thinking skills.
- Incorporate Inuit-specific health and education resources through frameworks of cultural safety and trauma-informed care.
- Develop a digital mental health platform through a connected approach to peer support
 networks, educational resources and art therapies that include mobile applications and games ensuring a continuum of mental wellness activities and support are provided for Inuit impacted
 by trauma and adversity.
- Establish guidelines and best practices for data gathering and reporting about Inuit and individual profiles and vulnerabilities, structured on information, consultation, and consent.
- Enable leadership opportunities for Inuit youth and adults that builds on the strength of Inuit knowledge and ways of being to harness the use of technology

A smart cities approach that recognizes and builds on the value of connected technology while understanding and preventing its risks, blind spots and pitfalls is imperative in measurably reducing the suicide rate in Nunavut through the outlined goals and outcomes.

The Mental Health Commission of Canada's E-mental Health platform defines e-Mental Health as "mental health services and information delivered or enhanced through the internet and related technologies"; and argues that the use of technology is transforming the way in which health services are provided and received. They acknowledge that many individuals with mental health risks are not able to access the appropriate kinds of professional support or treatment due to limitations in access to care based on regional, professional, or resource limitations²⁰, as well as due to social inequities.

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¹⁸ To clarify, a protective factor is something that decreases a person's chance of illness or death

¹⁹ The Mental Health Commission of Canada. <u>E-Mental Health in Canada: Transforming the Mental Health System Using Technology</u>. Page 2. Accessed on April 6, 2018.

²⁰ *Ibid*, Page 1

Our initiative will improve protective factors against the risk of suicide by enabling access to e-mental health resources and delivering a digital literacy curriculum through better connectivity infrastructure and community makerspaces.

Additionally we believe that youth can be positively impacted by engaging with others on the internet and social media through interactions built on the principles of web-safety and anti-bullying - and that interacting in Inuktitut through digital platforms has the potential to dramatically re-enfranchise youth by reinforcing pride in Inuit culture, language and heritage.

Through the use of computers, smartphones applications, social media, and gaming (to name a few), the Mental Health Commission of Canada states that patients can become empowered to make informed decisions on managing their health, and services can be delivered in cost-effective ways across Canada, including remote and isolated communities²¹, and with shorter wait times. The National Inuit Suicide Prevention Strategy also outlines as one of their action items the creation and improvements of support networks through services that incorporate e-technologies²².

At the same time, this proposal aligns itself with the Truth and Reconciliation Commission of Canada, and its calls to "eliminate educational and employment gaps between Aboriginal and non-Aboriginal Canadians"²³, to "to acknowledge that the current state of Aboriginal health in Canada is a direct result of previous Canadian government policies, including residential schools, and to recognize and implement the health-care rights of Aboriginal people as identified in international law, constitutional law, and under the Treaties"²⁴, and "to establish measurable goals to identify and close the gaps in health outcomes between Aboriginal and non-Aboriginal communities"²⁵.

Simultaneously, the Qikiqtani Truth Commision also calls for the development and distribution of Inuktitut and Inuit based curriculum that embraces Inuit language and culture while addressing intergenerational trauma caused by historical wrongdoings²⁶. The QTC also calls for the acknowledgement that the high levels of suicide are due to the social inequities established by previous governments, and for current governments and Inuit communities to work together to improve healthy communities and find a way forward to achieving saimaqatigiingniq²⁷.

²² Inuit Tapiriit Kanatami, National Inuit Suicide Prevention Strategy. Page 35. Accessed on April 6, 2018

²¹ *Ibid*, Page 1

²³ <u>"Truth and Reconciliation Commission of Canada: Calls to Action"</u>, The Truth and Reconciliation Commission of Canada, 2012. Call to Action # 2 Accessed April 17, 2018.

²⁴ "Truth and Reconciliation Commission of Canada: Calls to Action", The Truth and Reconciliation Commission of Canada, 2012. Call to Action # 18. Accessed April 17, 2018.

²⁵ <u>"Truth and Reconciliation Commission of Canada: Calls to Action"</u>, The Truth and Reconciliation Commission of Canada, 2012. Call to Action # 19. Accessed April 17, 2018

²⁶ "QTC Final Report: Achieving Saimaqatiqiingniq". Qikiqtani Truth Commision: Thematic Reports and Special Studies 1950-1975. Published by Inhabit Media Inc. 2013. Pages 53-82

²⁷ "QTC Final Report: Achieving Saimaqatiqiingniq". Qikiqtani Truth Commision: Thematic Reports and Special Studies 1950-1975. Published by Inhabit Media Inc. 2013. Pages 53-82

To measure our impact and results, we will develop and maintain an evaluative process through digital data collection, in-person and online surveys, interviews, and focus groups with community members such as youth, parents, educators, organizations, councils and municipal governments; as well as with our collective of partners and community of leaders. We will build and implement evaluation tools to collect and interpret qualitative data, such as a partner feedback forms, youth participant surveys, parent engagement surveys, an internal experience tracker, a library of 'best' support practices alongside an internal guide to coordinate between our team.

Strategies for measuring progress will be evaluated through the following key indicators and outcomes:

- Improved strength of network infrastructure through successful mesh networking
- Increase in rate of digital literacy amongst youth and participation in digital platforms
- Increase in usage of makerspaces and creative production
- Increase in usage of digital art therapy applications
- Increase in reach, availability, and accessibility of educational resources and Mental Health applications (developed through this proposal)
- Increase in digital communities and peer support networks
- Increase in opportunities for leadership and employment in technology
- Reduced stigma in seeking support for mental health care

Overall, our proposal will engage Inuktitut speakers to develop digital skills and transmit language and cultural knowledge to the next generation of Inuit through digital platforms. It will provide youtl with contemporary forms to engage with their cultural heritage, thus having a positive effect on mental and emotional health. They are important language retention initiatives that will support cultural continuity in a digital environment.

Continued Engagement

Question 5: Please describe how your community residents have shaped your Challenge Statement. Describe your plans for continuing to engage and involve them in your final proposal going forward.

The Nunavut Association of Municipalities (NAM) is applying to the Smart Cities Challenge on behalf of the 24 communities of Nunavut - and has partnered with Pinnguaq Association, the Embrace Life Council, and the Qaujigiartiit Health Research Centre (QHRC) to identify a priority list of activities to be included in the Smart Cities Challenge proposal in support of its challenge statement.

The communities in Nunavut to be served are Inuit communities, and the NAM has ensured that this application addresses the specific needs and challenges that Inuit face in relation to mental health services and suicide prevention strategies. The activities and goals of this proposal are meant to benefit Inuit throughout Nunavut.

NAM has been communicating with partners and working collaboratively in creating the draft proposal through the cloud-based platform Google Drive, where a working draft can be shared and edited simultaneously by each participant. Through this platform we can address concerns as they come up and integrate feedback into the grant-writing process.

Additionally, the NAM has reached out to Senior Administrative Officials of the Municipalities of Nunavut, and to Community Liaison Officers to communicate its intentions and to request input from each community's stakeholders regarding the Smart Cities Challenge, as well as to request names and contact information for Community Wellness Officers.

The NAM has also reached out to The Nunavut Economic Developers Association, who has requested input through its membership of Economic Development Officers operating in various communities throughout the territory.

Partner Organizations have consulted internally with management and staff and have provided preliminary input and feedback based on a draft document that was sent out for discussion. The Embrace Life Council and the Qaujigiartiit Health Research Centre have been key in providing feedback on the feasibility of the proposal from an Inuit based suicide prevention strategy and mental wellness perspective.

Pinnguaq Association has been spearheading the proposal from a technical perspective, outlining a vision for holistically integrating digital literacy, app development, games, and digital tools with the health and wellness goals and priorities.

A partner meeting was held on April 13th, 2018 in Iqaluit, NU between all contributing organizations to discuss the first draft of the proposal - its goals, objectives, and activities, where salient issues were discussed and adapted into a final proposal draft. Specific feedback that came to light through this process concerned issues regarding the ambition, scope, and feasibility of the project based on accessible resources for implementation.

Particularly, we entertained the idea of developing a culturally responsive conversational AI, which would be able to speak and understand Inuktitut; and with which one would ultimately engage with through a smart device similar to Google Home or Amazon Alexa. It was decided by consensus that this initiative would be too ambitious in relation to our ultimate goals, and that a focus on community-based educational initiatives, mental health applications, network infrastructure, and creative spaces were the priority. Additionally, the Qaujigiartiit Health Research

Centre has highlighted the importance of digital art therapies - a focus of which was adopted into the proposal.

The second issue that came up concerned the surveillance and consent of individuals regarding the risk and vulnerabilities associated with the use of personal information in a 'data and connected technology' platform that underscores the Smart Cities Challenge. Collectively, we acknowledge that collecting, mining, and profiting from using personal data can compromise the safety of thousands of Inuit people. To protect individuals' data, we will consider the specific vulnerabilities through an acknowledgement of the legacies of colonial violence, and an understanding of how colonialism has shaped the way in which Inuit experience harm today - in both physical and digital platforms.

We will address this feedback by building on education, information, and consent, ensuring that the vulnerabilities experienced by Inuit are not reproduced in digital environments, and that personal data and digital labour are not subject to surveillance and exploitative practices that characterize the use of data by commercial entities.

- Our initiatives will prioritize self-determination, Indigenous sovereignty, and security through training and education on web-safety, cybersecurity, privacy laws, cyberbullying, harassment, surveillance, and profiteering in online environments.
- We will train facilitators and trainees with the knowledge, awareness, and skills necessary to promote safe experiences for Indigenous people in digital and online systems through an anti-oppression and cultural safety framework.
- We will incorporate wellness and communication applications that operate through a mesh network so as to avoid the collection, storage, monitoring, or logging of any user traffic or content by an ISP or a central regulating authority.

Lastly, we discussed how to move forward with an inclusive and meaningful consultation and outreach plan for the development of the proposal. Initial consultation strategies described here requested input from organizational leaders including Senior Administrative Officers, Economic Development Officers, Community Liaison Officers, and Community Wellness Officers. However, the Embrace Life Council has requested, with consensus from all partners, that youth engagement sessions be a high priority for the second phase of consulting. As a result, if this preliminary proposal is accepted to proceed to a final proposal, we plan to expand the consultation to community residents, particularly youth, parents, and educators through the development of, and investment in, a comprehensive outreach plan that will give shape to this multifaceted initiative. This plan will include the organization of youth-centred focus groups and a marketing campaign directed to each community's residents to request input on the development of all major services.

Additionally, NAM will continue to consult organizations through networks that include Councils, Mayors, Senior Administrative Officer, Economic Development Officers, Community Wellness Officers, Government Liaison Officers, Regional Inuit Organizations, and Community Liaison Officers.

Section 2b: Preliminary Proposal

Preliminary Proposal Activities

Question 6: Please describe your preliminary proposal and its activities or projects

te(a)ch

te(a)ch is a free, accessible, sustainable, and culturally responsive K-12 computer science curriculum for Indigenous youth in Nunavut; with digital content and materials that are reflective of Inuit culture, and educational resources that are accessible in Inuktitut. It is currently being implemented across Nunavut, with workshops scheduled in 15 communities for 2018.

The goal of the program is to introduce, foster, and encourage people to understand, control, and create with the technology that surrounds them, leading to increased participation of Inuit in the digital economy. te(a)ch comprises a curriculum of 100 lessons with a core learning focus of computer science alongside engineering, game design, mental wellness, cultural exploration, and physical activity. It is a program with benefits that extend well beyond simply teaching "how a computer thinks". The goal is to implement equitable practices in digital literacy initiatives and enable Inuit to critically engage and produce digital content in informed, safe, and positive ways.

This curriculum creates cultural continuity and reinforces Inuit language, culture, and history in a digital environment. It plays its part in increasing social equity by reducing the digital divide in Canada. It enables leadership opportunities through its *Train the Trainer* model, and harnesses the strength of Inuit knowledge and ways of being to build agency and ownership in the use of technology as a creative tool.

The goal is to deliver the te(a)ch curriculum through permanent makerspaces in each community in Nunavut; as well as through a learning management system that is open, editable, and accessible to Inuit communities - as well as to other Indigenous communities across Canada.

Makerspaces

Our proposal includes the establishment of permanent makerspaces in each community that will serve as hubs for digital education, creativity, and experimentation. These spaces will incorporate the te(a)ch curriculum to encourage the development of interactive learning experiences in technology through coding and game design. Furthermore, permanent makerspaces will ensure the openness, longevity, and continuity of a digital education and wellness platform.

The educational programming delivered in these spaces will apply STEAM (Science, Technology, Engineering, Art, and Math), a method of instruction where students use hands-on learning to engage with the content of these subjects. These spaces will enable a move beyond digital literacy and educational technology for simple consumption and production to a creative and experimental outlet for artistic expressions that reflect culture and identity. At the same time, these makerspaces will also provide inclusive, safe, and nurturing environments for youth that support social and emotional development and connections. They will be staffed by community champions, who we've worked with in developing and delivering the te(a)ch program in the past, and offer stimulating educational programming targeted to different interests and age ranges. All staff will have ASIST (Applied Suicide Intervention Skills training), delivered by our partner, the Embrace Life Council, to be able to recognize if/when someone might be having thoughts of suicide, and to offer individualized support for their safety.

Practically, we will partner with each municipality to determine the appropriate space for each hub. Through existing partnerships with Computers For Schools Nunavut, we will provide the equipment (hardware and software) to furnish each hub with the appropriate technology. Through a partnership with NunaGeek Solutions Inc., along with Northwestel's commitment to bring broadband connectivity to all communities in Nunavut by 2019, each makerspace will house supernodes and access points to the local mesh network.

Mesh Network

At present, all communities in Nunavut are restricted to Satellite internet service provision which often has data transfer speeds comparable to dial-up service of the 1990s. To address this, we will develop local and interconnected mesh networks in each community in Nunavut to provide affordable, safe, democratic, and Inuit-led communications that mobilize electronic services for mental health and wellness.

Mesh networks refer to a distributed mesh of local but interconnected networks that provide the basic infrastructure for connectivity. They are a technology designed to allow people to communicate when regular cellular networks are unavailable, like in remote and isolated communities. A mesh network consists of an array of nodes that are strategically placed in a community, and act as dynamic connection points to a private local area network that does not depend on any centralized organization (like a phone company or ISP). It enables packets to use

multiple routes to travel through the network, making them more robust. In the absence of a central regulating authority, mesh networks promote the privacy and protection of a community's data. Each node emanates from wireless capable electronic devices (computers, smartphones) that link the community for communication and information-sharing purposes.

Mesh networks will be deployed in each community to share resources amongst themselves. They are open and replicable as they can theoretically be installed by any community - creating a bottom-up network infrastructure. As a result, mesh networks can be used as resilient systems of communication that promotes Indigenous sovereignty and self-determination while improving connectivity between individuals in small communities.

For example, the <u>eNuk</u> app is a well-known program, designed by Inuit in Rigolet, Nunatsiavut, that integrates environment and health monitoring through a mesh network. This enables community members to track changes in the environment and share timely and accurate information with each other. These communications are implemented through a Canadian mesh network solution by <u>RightMesh</u>, based in Vancouver, BC.

Pinnguaq Association will lead the implementation of mesh networks in Nunavut along with local experts NunaGeek Solutions Inc, who provide end to end tech services and network engineering. NunaGeek has experience in installing meshnet hardware built for Northern temperatures and environments; and is familiar with the connectivity issues that concern a project of this magnitude. Northwestel will support this initiative through its commitment to install Bell Mobility cell service and improve broadband internet and the availability of wireless hotspots in each community.

By implement wireless mesh networks we will improve network infrastructure to support local area networks and intra-community connectivity, reducing isolation and enabling peer-to-peer connections.

Digital Art Therapy

Materials for art therapy have expanded from traditional materials like painting, drawing, sculpture, and music, to include digital forms of self-expression and communication. Hence, we propose to develop and implement art therapy applications, along with relevant educational programming that will encompass several digital mediums, including the following:

- Spoken Word, Performance, Poetry on digital platforms (Inuktitube, Youtube, SoundCloud, Twitch)
- Pixel Art
- o 3D modelling
- Digital painting, drawing, and coloring
- Digital photography and photo-editing, digital collage, gifs, illustrations

- Video Art
- Digital storytelling and storyboarding
- Game Design

To facilitate this type of engagement, we will equip each computer with the following software and capabilities:

- Adobe Creative Suite
- Open/Libre Office Suite
- Audacity
- Scratch
- Python
- Game Maker
- Raspberry Pi
- Unity
- Starcraft
- Puzzle Creator
- o TWINE
- Lightbot
- MineCraft
- Tilt Brush

Mental Health Applications

Wellness Chat:

We propose to develop a community chat application system that would enhance peer support groups and contribute to maintaining communications between individuals. We are aware that Facebook and Facebook Messenger have an important hold in the community and serves as the primary means of social media communication. We do not want to duplicate services. However, we want to provide safe alternatives for individuals to connect with others through a framework of support - and enhance the capabilities of peer networks by activating online channels of communication. Simultaneously, we want to acknowledge that centralized 911 emergency services are not available in Nunavut, so it is important to create and disseminate Nunavut-specific and culturally responsive resources that can be integrated into social media platforms.

This chat will enable:

- General chat channels as well as the capacity for one-on-one or multi-person private conversations. Channels will be categorized under interest or issue based groups (such as: single parents, Alcoholics Anonymous, and others)
- Online chats with mental wellness volunteers (For example, we will approach the Nunavut Kamatsiaqtut Help Line to discuss the possibilities of integrating services)

- Options to engage in in-person counselling and support
- Resources, referrals, and information in Inuktitut on counselling and clinical services from the Embrace Life Council, the Kamatsiaqtut Help Line and other community organizations.

Similarly, <u>BeanBagChat</u>, is an online door to connection, mental health resources, peer support, and professional counselling in Toronto. We will explore partnering with BeanBagChat to localize a Nunavut specific application that is deployable in every community and scalable to other communities across Canada.

Gamified Interventions

It has been found that "quality computer games have been shown to enhance concentration, improve retention of information, facilitate deep learning, and bring about behaviour change"²⁸. As a result, computer-based games and game mechanics have been developed to support learning and motivation in health, education, and other sectors, where initial studies have pointed to benefits for psychological and behavioral changes ²⁹. Our proposals for game development take place in three streams:

• Gamified Therapy: SPARX

This category translates an evidence-based mental health therapy such as Cognitive Behavioural Therapy (CBT) into a game format, where game mechanics encourage problem solving skills and experiential learning.

For example, <u>SPARX</u>, is an online computer program that helps young people suffering from mild depression, anxiety, or stress, developed by the University of Auckland. SPARX uses game-based technology and is the world's first scientifically-proven 'gamified' online therapy for depressed young people. Pinnguaq has partnered with Embrace Life Council, York University and the University of Auckland to adapt the SPARX game from a Maori cultural context to an Inuit cultural context. The project is in development and the goal is to make it available in Nunavut as part of the te(a)ch program.

• Inuit Specific Applied Games

Additionally, we want to take a step back from implementing gamified CBT techniques that ignore issues like PTSD, and move to a new platform that will be created specifically by and for Inuit, incorporating a framework of cultural safety and trauma-informed care that is responsive to community needs.

²⁸ Fleming, Theresa M. et al. "<u>Serious Games and Gamification for Mental Health: Current Status and Promising Directions.</u>" *Frontiers in Psychiatry* 7 (2016): 215. *PMC*. Web. 11 Apr. 2018.Accessed April 11, 2018 ²⁹ *Ibid*.

We will research and develop gamified applications that are based on *Inuit Qaujimajatuqangit*, the Inuit knowledge system and worldview, to provide the foundations upon which social/emotional, spiritual, cognitive, and physical well-being are built³⁰, and define the concepts of, and pathways to health and wellness..

Understood generally as 'traditional knowledge' Inuit Qaujimajatuqangit also refers to "Inuit ways past, present, and future" - "a knowledge embedded in process" As such, continuing Inuit Qaujimajatuqangit through technology and digital toolsets has the capacity to further the well-being of Inuit in an increasingly digital world.

The opportunity to develop an application like this is unprecedented and transformative; it will be the first of its kind to produce culturally safe and responsive computerized and gamified interventions based on Inuit values and principles. At the same time, this game will be developed in alignment with evidence-based frameworks proven to treat the impacts of trauma (like Emotion-Focused Therapy (EFT) and EMDR), and in consultation with local clinicians like Melanie Stubbing, whom we intend to approach at the research stage.

By researching and incorporating these methodologies into gamified applications that are Inuit specific and culturally conscious, we will lead the way in incorporating e-mental health care initiatives through a smart cities approach designed to promote wellness in Nunavut.

• Game Design

Aligned with research that states that "Game and computer design share an opportunity for creativity and innovation in helping to build and assess preventative or therapeutic tools³²", youth and adults will be encouraged to experiment in making games through the te(a)ch curriculum and the community makerspaces. We will incorporate Inuit stories and myths into the game designs in order to extract lessons and involve community members in developing applications and interfaces that work for them.

This play and experimentation will encourage digital literacy and online participation in a culturally responsive and safe environment'. Games played and developed will be in Inuktitut and thematically relevant to Inuit culture as a way to promote and preserve heritage.

211 Nunavut Application

This application will centralize medical information that is accessible in Inuktitut - such as signs and symptoms of conditions like depression or anxiety, as well as local resources and options

³⁰Tagalik, Shirley. <u>Inuit Qaujimajatuqangit: The Role of Indigenous Knowledge in supporting wellness in Inuit Communities in Nunavut</u>. National Collaborating Centre for Aboriginal Health. University of Northern British Columbia. Page 2

³¹ *Ibid*, Page 2

³² Fleming, Theresa M. et al. "<u>Serious Games and Gamification for Mental Health: Current Status and Promising Directions.</u>" *Frontiers in Psychiatry* 7 (2016): 215. *PMC*. Web. 11 Apr. 2018.Accessed April 11, 2018

for treatments. This information can be accessed directly through the app or can be linked from other related applications.

Goals, Strategies, and Plans

Question 7: Please describe the ways in which your preliminary proposal supports your community's medium and long-term goals, strategies, and plans.

Our preliminary proposal is a multifaceted approach to increasing protective factors aligned with Inuit- and Nunavut-specific suicide prevention strategies through a digital platform.

The Mental Health Commission of Canada's "E-Mental Health in Canada: Transforming the Mental Health System Using Technology" briefing document outlines the transformative potential of delivering mental health services enhanced by digital technologies in two different ways. The first is by empowering patients with the provision of health information, enabling greater choice and control in managing their own conditions more effectively³³. This stream also acknowledges the role of peer support networks in mental health through the use of technology³⁴. The second stream is through the use of specific technologies, like gaming, computerized interventions, wearable technology, and social media, to mention a few.

Our proposal's activities contain elements of both streams, and are based on user empowerment through improved access to resources - strengthened by increased infrastructure in connectivity and space for nurturing positive wellbeing. Our platform will ensure a continuum of mental wellness support through digital technologies guided by the principles of a trauma-informed approach, recognizing the histories of colonial violence and social inequities for Indigenous communities in Canada. It will contribute to closing the gap on education, employment, and health disparities as called for by the Truth and Reconciliation Commission of Canada and the Qikiqtani Truth Commission.

Our proposal to develop an Inuit-specific digital mental health platform is aligned with, and meant to complement the action items from, Inuit Tapiriit Kanatami's National Inuit Suicide Prevention Plan, and from Inuusivut Anninaqtuq (United For Life), Nunavut's Suicide Prevention Action Plan for 2017-2022.

Our goal to build healthy communities and reduce the suicide rate in Nunavut will be sought by increasing social equity with regards to access to internet and digital literacy initiatives, enabling cultural continuity by reinforcing Inuktitut on digital platforms, providing nurturing environments

³³ The Mental Health Commission of Canada. <u>E-Mental Health in Canada: Transforming the Mental Health System Using Technology</u>. Page 6. Accessed on April 18, 2018.

³⁴ *Ibid*. Page 6

for creative expression and experimentation with new media, and by incorporating culturally responsive and culturally safe health and education resources and applications.

Successful Implementation

Question 8: Please describe your community's readiness and ability to successfully implement your proposal.

The NAM has significant experience in governance for the 24 municipalities of Nunavut. NAM will take advantage of its membership to structure and streamline communications and accountability regarding the consultation, development, and implementation of the smart cities proposal. Each Senior Administrative Official (SAO) will be involved in the process to lead and support the smart cities proposal in their community.

As the technical and logistical project manager for this proposal, Pinnguaq Association has significant expertise in developing and implementing multidimensional and multi-stakeholder initiatives. Pinnguaq delivers the te(a)ch curriculum, a series of 100 computer science lessons designed for Inuit youth, implemented in each of Nunavut's 25 communities, and funded by the Government of Canada's Department of Innovation, Science, and Economic Development. This curriculum is delivered through structured outreach and collaboration in each community in Nunavut, and through established partnerships with organizations like Computers for Schools Canada and SSi Micro, and will be integrated into the Smart Cities proposal as the digital literacy component.

Pinnguaq has a long history of working with other Nunavut-based businesses and not-for-profit organizations. Most recently, they partnered with Ilitaqsiniq, the Nunavut Literacy Council, to produce the application 'Uqulimaarluk' (Read to Me), a literacy application or 'reading app' that aims to develop Inuktitut reading skills for youth through technology. They have a large portfolio of video-game development and localizations in Inuktitut.

Additionally, Pinnguaq is involved in a major multi-partner project with regard to developing the <u>SPARX</u> game, and adapting it from a Maori cultural context to an Inuit cultural context. Pinnguaq has been working as the main technical lead, alongside other stakeholders from York University and the University of Auckland in New Zealand. The development of the SPARX game is in an advanced stage of completion and will be part of our smart cities proposal regarding the implementation of gamified therapy applications.

In general, the NAM, Pinnguaq, The Embrace Life Council, and the Qaujigiartiit Health Research Centre will work together as equal partners in this project, each with a defined scope of activity. Our collaborative methodology will consist in establishing a managing committee with equal representatives of each organization where major decisions and directions will be discussed and arrived at by consensus.

Pinnguaq has a dedicated team of staff in several departments: The Technical department (includes application development, web programming and design and software engineering); the Art department (includes Graphic Design, 3D Modelling and 2D Art and Assets), the Education Department (includes curriculum development and educational programming and facilitation), and The Administration/Management department.

We plan to assign a working team to carry out the steps related to implementing each activity outlined in the preliminary proposal. These working teams will include Pinnguaq employees from the appropriate departments (some cross-over will occur), along with staff members from our existing partnerships, and possibly external partners brought in as consultants and experts to support the project. Each team will be assigned a Project Lead, in charge of planning, implementation, establishing timelines, and reporting back to the Executive Director and representative to the managing committee.

On the other hand, the Embrace Life Council manages training and educational initiatives that further the Nunavut Suicide Prevention Action Plan throughout the territory. They will have a on the ground presence throughout the life of this project and work collaboratively with SAO's and other actors in the development, implementation and maintenance of each activity on the proposal. Similarly, the Qaujigiartiit Health Research Centre works with multiple partners through community-run research projects to support wellness initiatives, and has extensive experience in working creatively with community members while promoting ethical research practices.

Pinnguaq's organizational strengths lie in forming strong, long-lasting partnerships with complementary organizations and building relationships with community stakeholders. Their collaborative working process ensures everyone's voice is being heard and taken into account for the direction of each project. Additionally, their experience in localizing video-games to Inuktitut, developing Inuit-specific applications, and delivering culturally responsive digital literacy initiatives situate us in the right position to manage and implement this proposal.

With several partners working on the same project, things can often get confusing and lack a clear direction. To mitigate these risks, we will develop a collaborative agreement between all partners that outlines each one's duties, responsibilities, and deliverables that will clarify everyone's role in the larger project. At the same time, we will hire Project Lead/Project Managers for every working team to ensure that deliverable are met on time and on budget.

Plan and Budget Breakdown

Question 9: Describe your plan for using the \$250,000 grant, should you be selected as a finalist. Provide a high-level breakdown of spending categories and an accompanying rationale.

If we are selected as finalists, we have determined that our priorities lie in meaningfully engaging with community residents and piloting the installation of a mesh network and makerspace in one community.

Our comprehensive outreach plan will include the development of a marketing campaign geared to requesting input on each specific activity by Inuit living in each of Nunavut's 25 communities, with special focus on people with lived experience of mental health problems. We would like this engagement to dictate the shape and implementation of our platform. We will ask our constituents to opine on how these propositions may be applied to specific needs of each community, and/or how we can adapt them to create better services. It will include focus groups, interviews, youth engagement sessions, general information sessions and surveys. This campaign will be accessible in Inuktitut, and will be conducted on the ground through community presence, as well as online.

The piloting and scoping of a mesh network will include the services of NunaGeek Solutions Inc, and their expertise in local network engineering. This pilot will be useful for determining scale and size of the network, the distance required for the wireless signal to travels, the number of nodes required, the desired speed of the nodes, and the available network frequencies due to potential interference.

We will also pilot a makerspace in the same community the mesh network will be piloted in. These two initiatives will be developed together, with the makerspace housing a significant number of nodes and supernodes for the mesh network.

Outreach Campaign	Cost	Breakdown
Outreach Coordinator Salary	\$ 48,000	1 FTE at \$40/hr, 37.5 hrs/week, 32 weeks
Travel (Between each community)	\$ 40,000	\$1666 a flight x 24 flights

Marketing materials (design and print of forms, posters, website, online advertisement)	\$ 15,000	Contract work for graphic designer (\$5,000), web developer (\$5,000) plus cost of printing, shipping (\$5,000)
Focus Groups, Youth engagement sessions, interviews, and general informational sessions	\$15,000	Cost of space rentals ((\$200 a rental) x 50 rentals (2 sessions per community)) + providing meals (\$100 a session per 50 sessions)
Translation English-Inuktitut	\$ 14,000	\$0.20/ word x 50,000 words (smart cities preliminary proposal, smart cities final proposal and all outreach materials) Live Interpretation at youth engagement sessions (\$50/hr per 50, 2 hour sessions)
Mesh Network		
Pilot of Mesh Network	\$ 30,000	Equipment: 50 nodes/routers at \$150 each Mounting hardware \$100/node(150) Ethernet cabling (\$5,000) Subtotal: \$15,500 Labour: Installing routers, software, applications and maintenance): 290 hrs @ \$50/hr = \$14,500
Administration		
Administration Overhead	\$ 25,000	Office rent, office supplies, internet connection (for 32 weeks)
Research	\$ 24,000	1 FTE at \$40/hr, 37.5 hrs/week, 16 weeks
Final Proposal Development	\$24,000	1 FTE at \$40/hr, 37.5 hrs/week, 16 weeks
MakerSpace		
Rent and basic furnishings	\$15,000	Rent, desks, chairs, lights

Hardware (Computers), and Software/Tools	In kind	(Pinnguaq in-Kind)
Total	\$ 250,000	

Partners and Collaborations

Question 10: Describe the partners that are or will be involved in your proposal. Where partners are not yet determined, describe the process for selecting them.

The Nunavut Association of Municipalities (NAM) represents community officials across Nunavut. The association was formed to make important contributions to decisions about Nunavut communities and capital projects. The group provides a single voice for mayors and municipal administrators of the territory's 25 communities. NAM will coordinate each community's involvement and manage the project as a whole. As the primary applicant for the Smart Cities Challenge, NAM's core responsibilities will focus on managing collective interests through governance and accountability.

The Pinnguaq Association is a not-for-profit organization whose mission is to embrace and use technology as a means of unifying and enabling Nunavummiut and Indigenous people in Canada. The organization works to incorporate play and gaming into various applications and endeavors that benefit education, economic development, and cultural expression. Pinnguaq has grown to act as the major provider of technological education and digital exposure to the territory of Nunavut. Our mandate is to foster the development of interactive experiences that push the limits of technology and cultural expression to strengthen capacity and build projects across the territory.

Pinnguaq's role will be to lead the technical and logistical project management. Pinnguaq will oversee the design, development, implementation, and maintenance of each facet of the proposal and work collaboratively with partners to achieve the outcomes outlined in this document.

The Isaksimagit Inuusirmi Katujjiqatigiit Embrace Life Council is a non-profit suicide prevention organization based in Iqaluit, Nunavut. It was established in January 2004 as a result of partnerships of many organizations. The council aims to contribute to the mental, emotional, and physical health and community wellness of Nunavut residents by providing education, research and statistical analysis, training, and a coordinated holistic approach to suicide prevention activities.

The Embrace Life Council will provide the strategic direction for the development of the proposal in relation to the identified objectives and the ultimate goal of reducing the suicide rate in Nunavut. It will ensure that community stakeholders and individuals with lived experience of mental distress or trauma are the beneficiaries of the overall proposal at every step of the way.

The goal of **Qaujigiartiit Health Research Centre** (QHRC), is to enable health research to be conducted locally, by Nunavummiut, and with communities in a supportive, safe, culturally-sensitive and ethical environment, as well as promote the inclusion of both Inuit Qaujimajatuqangit and western ways of knowing and understanding wellness to address health concerns, create healthy environments, and improve the health of Nunavummiut.

The QHRC will lead the research and development of mental wellness resources from a trauma-informed perspective, with a focus on gamified interventions. They will provide their professional expertise in community-led health and wellness initiatives aligned with the values of Inunnguiniq and Inuit Qaujimajatuqangit.

Additional partners are:

The **Nunavut Economic Developers Association**, who will support engagement with the proposal through its network of EDO's. **NunaGeek Solutions Inc.** will be involved as networking experts in the deployment of mesh networks, while **Northwestel** will support the initiative by enabling better connectivity and broadband internet in each of Nunavut's communities.

Section 3: Other Requirements

Proposal Summary

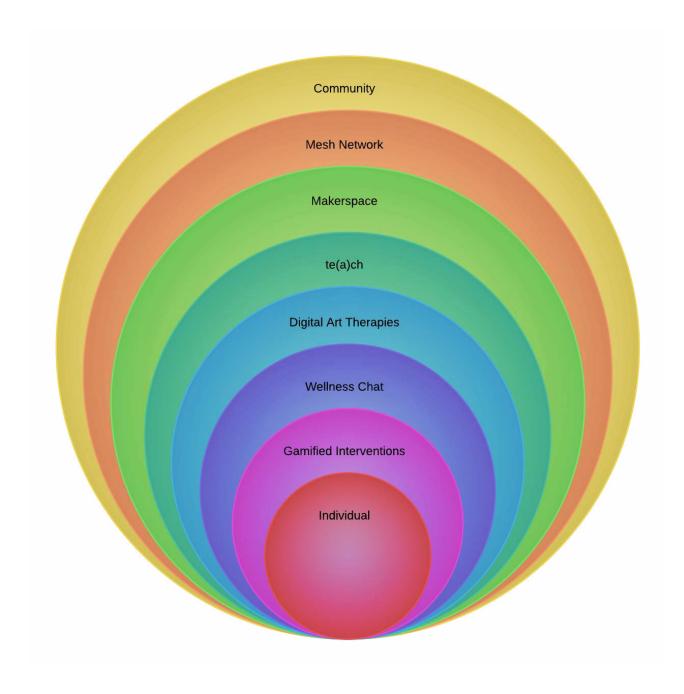
The Community, Connectivity, and Digital Access for Suicide Prevention in Nunavut is a collaborative effort to implement protective and preventive measures to reduce the risk of suicide in Nunavut through a decentralized and community-based digital health and wellness platform.

This platform will leverage digital access and connectivity to increase the availability and accessibility of mental health resources and support systems like peer to peer networks, educational initiatives, and creative outlets to all Nunavummiut. This includes an Inuktitut based digital literacy curriculum, improved and innovative network infrastructure, mobile applications, gamified interventions, digital art therapy, and permanent makerspaces available in each community.

This platform will rely heavily on community leadership and participation, and is based on *Inuit Qaujimajatuqangit*, the Inuit knowledge system and worldview, to provide the foundations upon which social, emotional, spiritual, cognitive, and physical well-being define health and wellness. It will provide Inuit youth with contemporary forms to engage with their heritage, reinforce Inuit language and enable cultural continuity through the use of technology. This is a transformative opportunity to incorporate a framework of cultural safety and trauma-informed care toward suicide prevention that is responsive to community needs.

Online Link

www.pinnguag.com



Appendix A - Letters of Support



P.O. Box 2259 Iqaluit, Nunavut XOA 0H0 Phone: (867) 975-3233

Fax: (867) 975-3234 Toll Free: 1-866-804-2782 Email: embracelife@inuusiq.com

Government of Canada Infrastructure Canada

To Whom It May Concern:

Please accept this letter of support for the Smart Cities Challenge proposal submitted by Nunavut Association of Municipalities (in partnership with Pinnguaq Association and Embrace Life Council)

Embrace Life Council is a non-profit suicide prevention organization based in Iqaluit, Nunavut. We began with the recognition that there needed to be a coordinated initiative in addressing the high suicide rates in Nunavut. Suicide in Nunavut is highest amongst youth, particularly Inuit males. We are determined to fight this.

This proposal will work towards implementing protective and preventative measures to reduce the risk of suicide in Nunavut such as increasing the amount and accessibility of peer support networks, education resources, and creative outlets that promote positive mental health to all Nunavummiut.

Thank you for your consideration. If you require additional information, please contact me at the telephone number or email contained within our letterhead.

Yours truly,

Kimberly Masson Executive Director



On behalf of Northwestel Inc., I am writing to express support for the Nunavut Association of Municipalities (NAM), the Nunavut Association of Municipalities Administrators (NAMA) and their efforts to secure funding through the Smart Cities Challenge.

Mental health and wellness impacts all Canadians, but few can comprehend the loss many Nunavummiut have experienced due to suicide. While the number of suicides per year declined slightly in both 2016 and 2017, the Eastern Arctic continues to struggle with one of the highest suicide rates in the world; a rate several times higher than elsewhere in Canada.

Government, Inuit leaders, the RCMP, business and the not-for-profit sector have come together to tackle this "epidemic." In 2016, partners developed a five-year suicide prevention action plan. A Summit that same year identified social media as one important tool to help, it also identified greater support at the community level as essential.

The project proposed by NAM/NAMA and their partners builds on these efforts, recognizing community-level support, as well as the role smart devices and data connectivity are beginning to play in mental health and wellness. Until recently, this has not been a viable option in Nunavut, as few communities had cellular service and Internet speeds have been prohibitive. However, in 2017, Northwestel was selected by the Government of Canada to bring broadband connectivity to all Nunavut communities. Project implementation has begun and, with our partner Bell Mobility, 15Mbps internet and LTE cellular will be available in all 25 Nunavut communities by the end of 2019.

For several years, mental health and wellness has been a priority for Northwestel, and our parent company Bell Canada. Northwestel supports the Nunavut Kamatisiaqtut Help Line and the Embrace Life Council, a Smart Cities project partner bringing strong experience and expertise to this initiative.

We encourage you to consider this application, and to consider the significant potential impact this smart initiative could have by literally making support available at people's fingertips.

Sincerely,

Frank J. Morgan

General Manager - Nunavut Operations



Telephone: 867-793-2874 Fax: 867-793-2509

P.O. BOX 149 3022 4th Avenue BAKER LAKE, NU XOC 0A0

April 24, 2018

Brian Fleming
Executive Director
Nunavut Association of Municipalities (NAM) and the
Nunavut Association of Municipal Administrators (NAMA)
Building 630, Qamutiq Building, Iqaluit, NU.
P.O. Box 4003, Iqaluit, NU
X0A 1H0

Dear Mr. Fleming,

The Municipality of Baker Lake supports the proposal that NAM is submitting and coordinating on behalf of the municipalities of Nunavut for using mobile data connectivity and Apps written in Inuktitut for Suicide reduction in Nunavut.

If the proposal is approved in the first round and awarded 250,000.00, we look forward to further consultation.

Yours truly,

Shewn Attungala

Mayor



Municipality of Cape Porset

P.O. BOX 30
CAPE DORSET, NUNAVUT
X0A 0C0

TELEPHONE: (867) 897-8943

FAX: (867) 897-8030

April 24, 2018

Brian Fleming

Executive Director

Nunavut Association of Municipalities (NAM) and the

Nunavut Association of Municipal Administrators (NAMA).

Dear Mr. Fleming,

The Municipality of Cape Dorset supports the proposal that NAM is submitting and coordinating on behalf of the municipalities of Nunavut for using mobile data connectivity and Apps written in Inuktitut for Suicide reduction in Nunavut.

If the proposal is approved in the first round and awarded 250,000.00, we look forward to further consultation.

Yours truly,

Timoon Toonoo

Mayor, Hamlet of Cape Dorset



CHESTERFIELD INLET, NUNAVUT X0C 0B0 PHONE (867) 898-9951 FAX (867) 898-9108

April 24, 2018

Brian Fleming

Executive Director

Nunavut Association of Municipalities (NAM) and the

Nunavut Association of Municipal Administrators (NAMA).

Dear Mr. Fleming,

The Municipality of Chesterfield Inlet supports the proposal that NAM is submitting and coordinating on behalf of the municipalities of Nunavut for using mobile data connectivity and Apps written in Inuktitut for Suicide reduction in Nunavut.

If the proposal is approved in the first round and awarded 250,000.00, we look forward to further consultation.

Yours truly,

Mayor Simeonie Sammurtok Hamlet of Chesterfield Inlet



MUNICIPALITY OF CLYDE RIVER P.O. BOX 89 **CLYDE RIVER, NUNAVUT X0A 0E0**

PHONE: 867 - 924 - 6220 FAX: 867 - 924 - 6293

E-MAIL: cao@clyderiver.ca

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⊳%_ხ∩∿ს: 867 - 924 - 6220 **ぺ**७५५७₫२∩∿៤: 867 − 924 − 6293 **ኄና∖ዾ፞ታ**⁰ cao@clyderiver.ca

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April 23, 2018

Brian Fleming

Executive Director

Nunavut Association of Municipalities (NAM) and the

Nunavut Association of Municipal Administrators (NAMA).

Dear Mr. Fleming,

The Municipality of Clyde River supports the proposal that NAM is submitting and coordinating on behalf of the municipalities of Nunavut for using mobile data connectivity and Apps written in Inuktitut for Suicide reduction in Nunavut.

If the proposal is approved in the first round and awarded 250,000.00, we look forward to further consultation.

Yours truly,

Sandy Kautuq

Mayor, Hamlet of Clyde River



Municipality of Hall Beach

P.O. Bag#3

Hall Beach, NU

Ph: 867-928-8850

40 95, sage

₽%_C: 867-928-8850

XOA OKO

Fax: 867-928-8871

X0A 0K0

~bdd: 867-928-8871

April 24, 2018

Brian Fleming

Executive Director

Nunavut Association of Municipalities (NAM) and the

Nunavut Association of Municipal Administrators (NAMA).

Dear Mr. Fleming,

The Municipality of Hall Beach supports the proposal that NAM is submitting and coordinating on behalf of the municipalities of Nunavut for using mobile data connectivity and Apps written in Inuktitut for Suicide reduction in Nunavut.

If the proposal is approved in the first round and awarded 250,000.00, we look forward to further consultation.

Yours truly,

Jaypetee Audlakiak

Mayor, Hamlet of Hall Beach

Municipality Of Igloolik

April 24, 2018

Brian Fleming

Executive Director

Nunavut Association of Municipalities (NAM) and the

Nunavut Association of Municipal Administrators (NAMA).

Dear Mr. Fleming,

The Municipality of Igloolik supports the proposal that NAM is submitting and coordinating on behalf of the municipalities of Nunavut for using mobile data connectivity and Apps written in Inuktitut for Suicide reduction in Nunavut.

If the proposal is approved in the first round and awarded 250,000.00, we look forward to further consultation.

Yours truly

Celestino Uvarak

Mayor, Hamlet of Igloolik



HAMLET OF KUGAARUK

P.O. BOX 205, KUGAARUK, NUNAVUT X0B 1KO

867-769-6281 FAX: 867-769-6069 e-mail: sao_kug@qiniq.com

April 24 2018

Brian Fleming
Executive Director
Nunavut Association of Municipalities (NAM)
Nunavut Association of Municipal Administrators (NAMA)

Mr. Fleming,

Our Hamlet of Kugaaruk very strongly supports and endorses the proposal that NAM is submitting And coordinating on behalf of our Nunavut municipalities for using mobile data connectivity and Apps written in Inuktituk for suicide reduction in Nunavut.

If the proposal is approved in the first round and awarded \$250,000.00, we look forward to further consultation.

Yours truly,

Canute Krejunark

Mayor

Hamlet of Kugaaruk



Hamlet of Pond Inlet P.O. Box 180 Pond Inlet, Nunavut XOA 0S0



April 24, 2018

Brian Fleming

Executive Director

Nunavut Association of Municipalities (NAM) and the

Nunavut Association of Municipal Administrators (NAMA).

Dear Mr. Fleming,

The Municipality of Pond Inlet supports the proposal that NAM is submitting and coordinating on behalf of the municipalities of Nunavut for using mobile data connectivity and Apps written in Inuktitut for Suicide reduction in Nunavut.

If the proposal is approved in the first round and awarded 250,000.00, we look forward to further consultation.

Yours truly,

Joshua Katsak

Mayor, Hamlet of Pond Inlet



HAMLET OF GJOA HAVEN

Box 200, Gjoa Haven, Nunavut, X0B 1J0 *Phone:* (867) 360-7141

Facsimile:

(867) 360-6309

April 23, 2018

Brian Fleming
Executive Director
Nunavut Association of Municipalities (NAM) and the
Nunavut Association of Municipal Administrators (NAMA).

Dear Mr. Fleming,

The Municipality of Gjoa Haven supports the proposal that NAM is submitting and coordinating on behalf of the municipalities of Nunavut for using mobile data connectivity and Apps written in Inuktitut for Suicide reduction in Nunavut.

If the proposal is approved in the first round and awarded 250,000.00, we look forward to further consultation.

Yours truly,

Joanni Sallerina

Mayor, Hamlet of Gjoa Haven, NU

Mayor@qiniq.com

867-360-7141



C」^もくΔ^c HへLc [〜]し Hamlet of Taloyoak PO Box 8

Taloyoak, Nunavut

Tel: 867-561-2300 Fax: 867-561-5057

April 24, 2018

Brian Fleming

Executive Director

Nunavut Association of Municipalities (NAM) and the

Nunavut Association of Municipal Administrators (NAMA)

Dear Mr. Fleming,

The Municipality of Taloyoak supports the proposal that NAM is submitting and coordinating on behalf of the municipalities of Nunavut for using mobile data connectivity and Apps written in Inuktitut for Suicide reduction in Nunavut.

If the proposal is approved in the first round and awarded \$250,000.00, we look forward to further consultation.

Yours truly,

Simon Qingnaqtuq

Mayor

Hamlet of Taloyoak

HAMLET OF WHALE COVE

PO BOX 120 WHALE COVE, NUNAVUT, XOC 0J0 Telephone: (867) 896-9961 ~ Fax: (867) 896-9109



April 24, 2018

Brian Fleming
Executive Director
Nunavut Association of Municipalities (NAM) and the
Nunavut Association of Municipal Administrators (NAMA).

Dear Mr. Fleming,

The Municipality of Whale Cove fully supports the proposal that NAM is submitting and coordinating on behalf of the municipalities of Nunavut for using mobile data connectivity and Apps written in Inuktitut for Suicide reduction in Nunavut.

If the proposal is approved in the first round and awarded 250,000.00, we look forward to further consultation.

Yours truly,

Mayor, Stanley Adjuk
Hamlet of Whale Cove



Hamlet of Grise Fiord P.O. Box 77, Grise Fiord NU, X0A 0J0

April 24, 2018

Brian Fleming
Executive Director
Nunavut Association of Municipalities (NAM) and the
Nunavut Association of Municipal Administrators (NAMA).

Dear Mr. Fleming:

The Municipality of Grise Fiord supports the proposal that NAM is submitting and coordinating on behalf of the municipalities of Nunavut for using mobile data connectivity and Apps written in Inuktitut for Suicide reduction in Nunavut.

If the proposal is approved in the first round and awarded \$250,000.00, we look forward to further consultation.

Yours truly

Laisa Audlaluk-Watsko

Deputy Mayor