COMMUNITY VOICES: PERCEPTIONS, PRIORITIES and NEEDS to INFORM ADAPTATION PLANNING in TUUKTUUYAKTUUQ

Report presented to the Hamlet of Tuktoyaktuk

February 27th, 2025

Authors:

MORGEN BERTHEUSSEN
KEARNEY COUPLAND
DEVA-LYNN POKIAK
LAURIANNE DEBANNÉ
MYLÈNE RIVA
LAUREN TRABOULSEE
LOUISE MERCER

Incorporated Hamlet of Tuktoyaktuk
Land of the Pingos

CINUK
Canada – Inuit Nunangat – United Kingdom Arctic Research Programme

Québec
Fonds de recherche – Nature et technologies
Fonds de recherche – Santé
Fonds de recherche – Société et culture

Housing, Community, and Health
Canada Research Chair

McGill


Welcome to
TUKTOYAKTUK
LAND OF THE PINGOS

Executive Summary

The Inuvialuit Hamlet of Tuktoyaktuk has been experiencing and adapting to changing environments for many years. As part of continuous efforts to understand and address these impacts, the *Nuna* project: 'Effective mitigation and adaptation to changing ground conditions for resilient coastal futures' (2022-2025) emerged from ongoing community consultations and builds on decades of research collaboration with the Hamlet. *Nuna* is Siglit Inuvialuktun for 'land', 'country', and 'soil', and represents the deep connection between people and their environment.

The *Nuna* project brings together a diverse group of community members and researchers from across Canada and the United Kingdom, each addressing one of the many interecting dimensions of climate changes. Within this large interdisciplinary team, we aim to identify the social, cultural, economic and infrastructure priorities that need to be considered in adaptation planning in Tuktoyaktuk. To do so, we conducted interviews with community members and representatives throughout May and June of 2023. Areal imageries of Tuktoyaktuk from 1950 to 2020 and an interview guide were used to prompt discussions. In total, 21 community members and representatives, aged between 20 and 85 years old, were interviewed. The interviews were analysed to reveal the larger themes that emerged across discussions. This report summarizes the content of the interviews and is organized in three sections 1) climate change and adaptation, 2) relocation, and 3) community life.

The first section of this report focuses on people's observations about change, including the type, the location, and the impacts of change have had–and are having–in people's lives. Changing weather, ground conditions, and wildlife are limiting people's ability of to travel safely and to pass down their traditional knowledge. Our analysis highlights the importance of involving youth in discussions around climate adaptation and allowing Elders share their knowledge and input about different strategies. While protecting in place remains a priority in the short term, many acknowledged the need to have a clear and transparent relocation plan in place.

The second section goes over the challenges related to relocation. Concerns about the feasibility of moving an entire community and its impacts on community life and traditional practices were voiced. While some are hopeful to avoid relocation altogether, others believe that it is inevitable. People shared what would need to happen for them to consider relocating, including losing critical infrastructure to erosion and experiencing extreme flooding. Initial criteria were also shared with us about a new location site: it needs to be permanent, located in higher and safer grounds, and ensure direct access to traditional fishing and hunting areas. Participants voiced their hope that relocation could create the opportunity to improve community conditions.

The third section describes different facets of community life, from what people love about Tuktoyaktuk to changes brought forward by technology, tourism, and the highway. People shared elements that are missing and needed in the community, such as better health and social services, ways to connect to culture, further educational opportunities, and investments in housing, transportation, and recreational infrastructure. Addressing these represent opportunities for community life to be improved. While some improvements can be made in the short-term, others can be incorporated in relocation planning.

To summarize the takeaways from community members interviewed in 2023 as part of the *Nuna* project, we developed a list of five key recommendations for adaptation in Tuktoyaktuk: 1) participate in climate change knowledge and action; 2) Increase environmental management and measures; 3) provide opportunities for education; 4) strenghthen infrastructure; and 5) plan for community relocation. These recommendations are presented in no order of importance.

5 Key Recommendations for Adaptation in Tuktoyaktuk

This list summarizes key recommendations from community members interviewed in 2023 as part of the *Nuna* project.

1 Participate in Climate Change Knowledge and Action

Engage with Community and Youth!
Involve the younger generation in climate change discussions (e.g., encourage parents to bring their children to community meetings). Foster broader participation by making meetings more interactive and accessible.

Incorporate Elder's Knowledge
Engage Elders in discussions about adaptation and mitigation, as their knowledge is invaluable. Ensure that Elders' input is central to future planning and decision-making.

Collaborate in research
Encourage collaboration and knowledge sharing between Inuvialuit and researchers. Ground research in traditional knowledge. Ensure that outcomes are relevant and beneficial to the community.

2 Increase Environmental Management and Measures

Control Erosion
Protect critical areas such as Tuktoyaktuk Island, the shoreline, the cemetery, and the Point. Review past erosion control efforts to address any shortcomings and improve future measures.

Protect water sources
Implement measures to protect and manage water sources, including addressing beaver activity and waste coming from the dump. Monitor water quality to prevent water contamination.

3 Provide Opportunities for Education

Enhance Traditional Education
Integrate traditional knowledge in the school curricula to ensure that the younger generation learns and preserves Inuvialuit culture, language, and skills.

Braid Knowledges
Emphasize the importance of braiding traditional knowledge and western sciences; talk about how they can be used together to navigate environmental challenges. Develop programs that combine modern technology with traditional practices (e.g., the SIKU app).

Offer Vocational Training Offer more trades and vocational training opportunities, especially in maintaining machinery and operating new technologies, to improve job prospects for youth and adults.

4 Strenghten Infrastructure

Invest in Culture and Recreation
Develop and maintain recreational infrastructure, such as a swimming pool and outdoor spaces, to provide healthy outlets for community members and alleviate social issues. Continue investements in programs that allow community members - youth, adults, and Elders - to spend time on the land and connect with cultural practices and traditions.

Develop Housing
Prioritize the construction of new housing units, particularly for Elders, and address overcrowding in existing homes. Increase accessibility to public housing and reduce wait times to receive housing.

Manage Tourism
Establish appropriate tourism infrastructure (e.g., campgrounds and RV parks) away from traditional harvesting areas. Implement guidelines to protect sitesfrom overuse by visitors.

5 Plan for Community Relocation

Develop a Detailed Plan
Create a complete and actionable relocation plan that includes feasability assessments, timelines, budget estimates, and logistical details. Incorporate insights on cultural preservation and traditional knowledge from Elders.

Communicate Clearly and Transparently
Provide clear, honest information about the feasibility, risks, and benefits of relocation to build trust and support within the community. Use maps and visual aids to help residents understand the process of relocation to a new site.

Address Emotional and Cultural Impacts
Recognize and plan for the emotional and cultural impact of relocation. Ensure ability to maintain traditional practices and community life. Provide necessary support (e.g., temporary accommodations or financial support).

Impower youth leadership
Develop programs to educate younger generations about the history and culture of Tuktoyaktuk to maintain cultural continuity in the new site. Involve youth in the planning since they are the future leaders.

Introduction

Like several other Arctic coastal communities, the Inuvialuit Hamlet of Tuktoyaktuk is experiencing the brunt of climate change and its impacts. Erosion, subsidence and flooding are threatening the physical, cultural and social landscape of the community. At current rates of change, Tuktoyaktuk is having to rapidly adapt in place and plan for community relocation.

To help inform adaptation planning in Tuktoyaktuk and foster community resilience, the *Nuna: Effective mitigation and adaptation to changing ground conditions for resilient coastal futures* (2022-2025) project was developed based on ongoing community consultations. The *Nuna* project is led by the Hamlet of Tuktoyaktuk and funded by the Canada-Inuit-Nunangat-United Kingdom (CINUK) research programme and the *Fonds de Recherche du Québec (FRQ).*

Nuna combines a team of community members and academic researchers investigating five dimensions of climate change: 1) coastal erosion, 2) ground subsidence, 3) air quality (dust), 4) nearshore sedimentation, and 5) the socioeconomic and cultural impacts of these risks. As part of the 5th dimension, we, a team of researchers from McGill University, Saint-Lawrence University and from the Hamlet of Tuktoyaktuk aim to answer the following question: **What are the social, cultural, economic and infrastructure priorities that need to be considered in adaptation planning in Tuktoyaktuk?**

Structure of the report

This report is organized in three sections. We begin by describing the methods we used to recruit participants, collect the data, and how we analyzed it. The results are unpacked in the sections 1) climate change and adaptation, 2) community relocation, and 3) community life. Weaved throughout these sections is the importance of Inuvialuit culture and ways of life, which grounded the interviews. During the interviews, it was made clear there is a need to adapt and mitigate climate change while also considering other spheres of community life. Any type of change, whether it is climate related or not, has repercussions on the health and well-being of community members in Tuktoyaktuk.

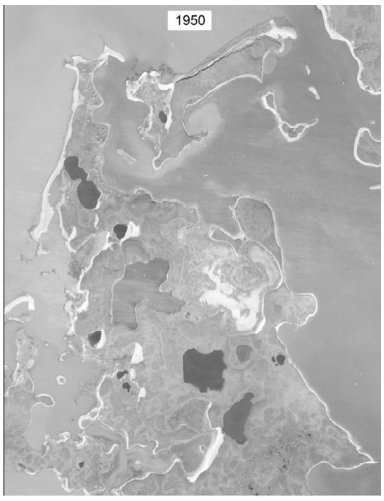
Throughout this report, we made sure to include as many quotes from participants as possible to highlight and center community voices in the discussion around climate change, relocation, and community conditions. We also made an effort, wherever possible, to refer to the Inuvialuktun names of places and areas in the community. These place names and areas are from a map originally created by Joe Nasogaluak Jr. in collaboration with W.F. Baird & Associates in 2022. Joe Nasogaluak Jr. shared this resource with our team for us to use in this report. The Inuvialuktun words that were used from the original map are also listed in the Glossary, found on page 27 of this report.

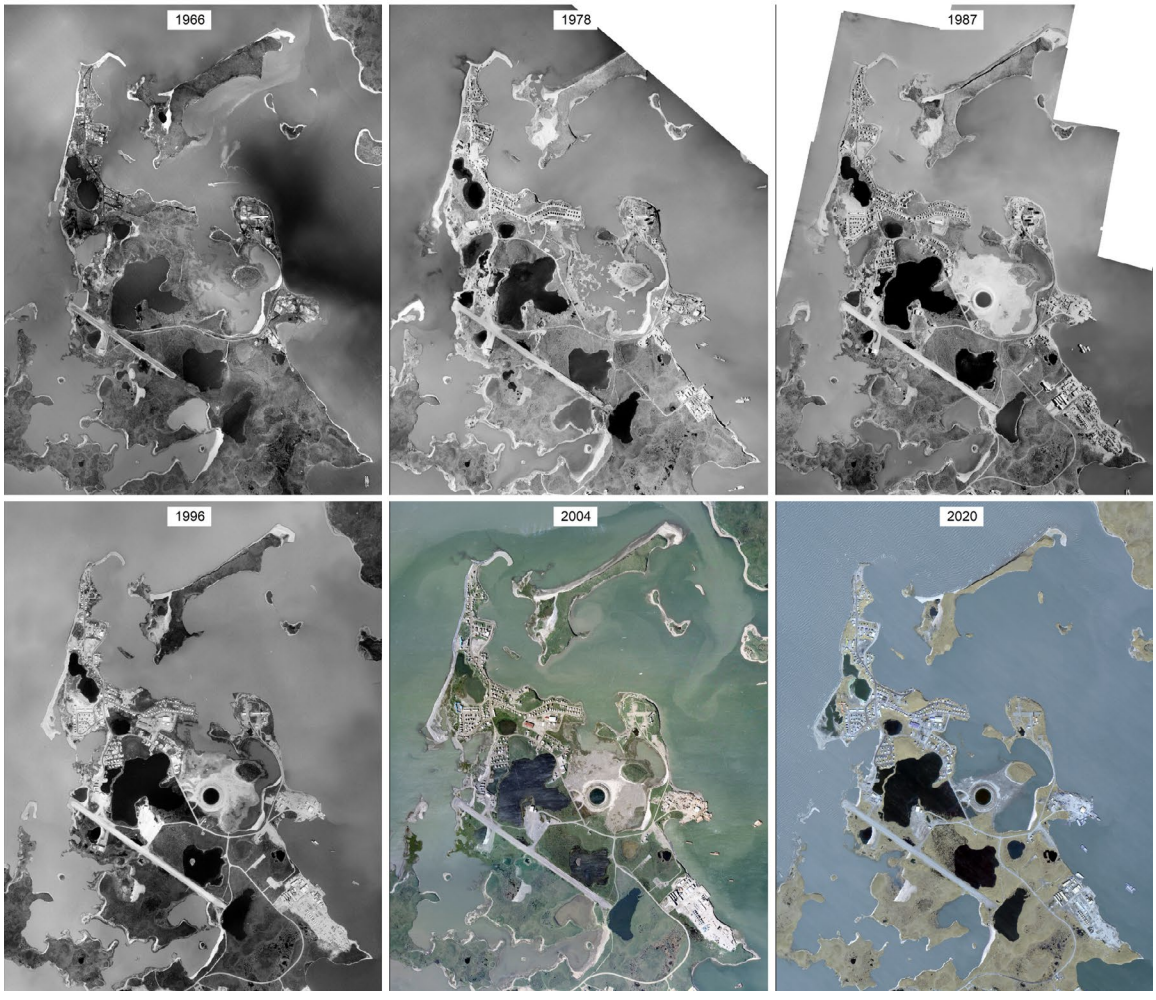
Methods

Data collection

Interviews took place over the month of May and June 2023. Participants were recruited with the help of Deva-Lynn Pokiak, the community liaison and community-based researcher for the Hamlet of Tuktoyaktuk. We also asked interviewees if they had recommendations of others that we should speak to. To conduct the interviews, we used an interview guide and areal pictures of Tuktoyaktuk from the 1950s to 2020. There were three main interviewers: Morgen Bertheussen (McGill University), Deva-Lynn, and Kearney Coupland (Saint Lawrence University). Whenever possible, Deva-Lynn led the interviews and was supported by either Morgen or Kearney.

The interview guide had questions about community life, observed changes over time, impacts of climate change, and relocation. The interviews were conducted in person at people's houses or at their place of work. They lasted between 30 minutes to 1 hour and 45 minutes. To compensate people for their time, all received a 100$ gift card to Stantons.





Data analysis

Interviews were audio recorded (no videos were taken) and then transcribed word for word. All identifiable information was removed from the transcripts to maintain confidentiality. For this study, we used thematic analysis to analyze the data. Thematic analysis is commonly used to summarize key topics discussed by participants (Thorogood & Green, 2018).

To begin the analysis, Morgen, Kearney and Lauren (research assistant) each read over one interview transcript and made a list of key themes and codes as they appeared in the interview text. Team members then met to discuss this list, validate it and make a final list that would be used to code the rest of the transcripts. To maintain consistency, Morgen conducted the rest of the analysis by uploading the transcripts to NVivo 14, a qualitative data analysis platform. When new codes emerged, these were added to the initial list. Interviews previously analyzed were revisited to make sure that no codes were overlooked. The codes emerging from the interviews are illustrated in Figure 1. The analysis was shared with all team members. Codes were grouped into larger themes to reveal the greater context of the study.

Who participated?

We conducted interviews with 21 community members and representatives. In total, 11 men and 10 women aged between 20 and 85 years old participated. Interviews were conducted with people living both in town and at Reindeer Point Road. People with varying occupations participated: subsistence harvesters, crafters, business owners, as well as workers at different community associations/businesses.

To maintain the confidentiality of participants, we removed the names and age of people next to the quotes included in this report. Instead, we present the gender (man or woman) as well as the age category of the participants (youth, adult, or Elder). Participants aged 20-35 years old were considered as 'youth'; those aged over 35 years old were considered as 'adults'; and Elders in the community were presented as such in this report.

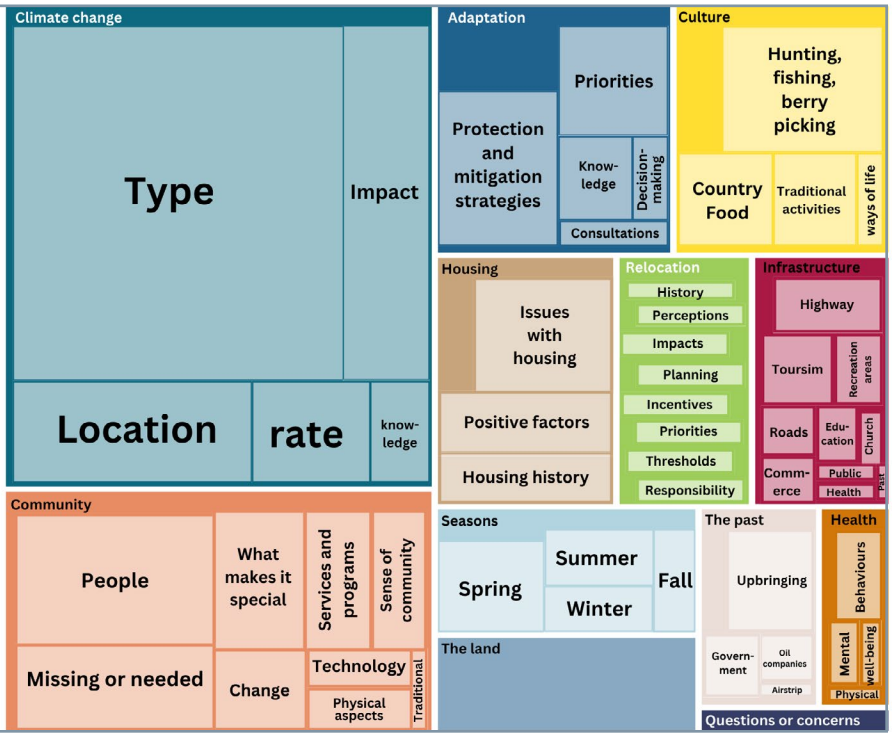


Figure 1. Emerging codes from data analysis of the interviews. The size of each shape is proportional to the amount of space taken up during the interviews.

Results

1.

Climate change and adaptation

The land, the animals, the plants... All of these are changing, and community members are noticing the rate and the location of these changes within the community and on the land. During the interviews, we shared some areal photographs of Tuktoyaktuk with participants so they could share where they have noticed change in the community. These areas are illustrated in Figure 2. Certain quotes were selected and placed surrounding the areas of change. Outside of community boundaries (not pictured), people mentioned other places that are changing including Reindeer Point (although to less extreme extent as other areas in the community center), the big Pingo, Hershell Island, Baillie Island, and Husky lakes.

Erosion

Important places for community members are being impacted by erosion. The Point, a traditional harvesting area that also protects the harbour from wave action and further erosion is disappearing under people's eyes, bringing up feelings of sadness.

"Hop over to 2020 and it's very clear. I mean look: all the land is just receding, we're sinking right back into the ocean." (Man, Youth)

There are also houses located near the *Nuuvuraluk*, meaning a point across from the Tuktuyaktuk Point, that have already been relocated inland. Participants saw the houses relocated from the point as a sign that more houses will have to be moved soon. Pointing out the *avatani*, or the outer edge, many talked about the differences in the shoreline.

One participant recalled how the beach used to be so far out in the 1970s, sharing stories about playing and running around there when they were young. To this day, this is a place where community members come together and spend time swimming and picnicking during the summer. However, many shared their concerns about how narrow it is becoming. In addition to the shoreline, we heard concerns about erosion impacting the roads. Participants discussed the road leading to the *Quinivak* (Dew Line) getting narrower and narrower. Although it is still driveable, some noted that the road is now only wide enough to accommodate one way traffic.

People also voiced their concern about the erosion destroying *iluviksivik* (burial sites). One participant mentioned how some graves located outside the community were lost to erosion this year. This brings up challenges to what to do with other graves, both in the community and on the land, that are threatened by erosion. Community members do not want to lose graves to the ocean, but there are also challenges associated with the idea of moving them elsewhere:

"See [showing a picture of a burial site located out on the land], that whole grave was gone. So, we can't do nothing. We can't move it there, nothing. Elders always told us that we have to just leave everything as it is. They're still in their afterlife, if you touch something then you or your family will be bothered and scared out of it." (Man, Adult)

When it comes to erosion, people emphasized protecting the shoreline, the cemetery, the Point, and Tuktoyaktuk Island. Particularly, a strong desire for effective erosion control measures to preserve Tuktoyaktuk Island, the *Qikiktaryuak* (large island) – which plays a crucial role in

"It's sad to see a lot of erosion happening, you know? Like our point where everyone used to go down. It was such a nice big rocky beach, and it was so wide that you'd be able to just go picnicking and there's people here and there." (Woman, Adult)

"We used to have a big white, nice beach and we used to play there when we were kids. But all that is gone now."
(Woman, Adult)

"Now it's moving towards the cemetery and eventually they're going to have to move the people in that cemetery as the land erodes in more. The cemetery is going to have have to move. Then you got the health center right beside of it and... It's all on the shoreline."
(Man, Adult)

"I just see a lot of erosion along the beaches. And that road to the dew line, it's becoming narrower and narrower."
(Woman, Elder)

"Now we're having a lot of high water, a lot of big wave action exposing permafrost. Not only Tuk area, but on the outskirts."
(Man, Elder)

"I never used to see the water come over the sandbar. Now, I don't know if it's because of erosion, probably, but the ocean spills into [Pokiak pond], and it just rises."
(Woman, Elder)

Figure 2. Areas of change in Tuktoyaktuk identified by participants during the interviews.

protecting the harbour and mitigating wind surges – was expressed (Figure 3). Others talked about building a breach or an offshore sea wall to lessen the impacts of the waves hitting the shoreline. Most importantly, people emphasized the importance of protecting Tuktoyaktuk for future generations.

"It'd be nice to have [Tuk Island] preserved and our community still here, so my grandkids can grow and my great grandkids or whoever is after us can still be here and [know] this is where our homeland was." (Woman, Adult)

Figure 3. Undercut in the land and visible permafrost on Tuktoyaktuk island.

Changing weather

Participants linked the acceleration of erosion to higher water, bigger wave action, and strong and consistent winds. These elements describe a perfect storm, which were noted by some as now happening earlier in the season, from August all the way to freeze up (early November). However, the perception about the severity and duration of storms varied across participants; while some said that storms lasted longer in the past, others reported that they seem to last longer today. Strong and consistent winds were also linked to increased erosion happening at the Point.

"You can see the land is disappearing, you can see it. Every spring you see it. And you see it when you get a big wind storm or something in the fall you can see clay just dropping, so that's part of the land that's disappearing, it's not going to come back." (Man, Adult)

While storms were discussed as a cause of erosion, some linked greater springtime erosion to fewer snowfall and less snow accumulation during the wintertime. Indeed, seasonal changes were another important topic of discussion. People shared that the weather was warming up earlier in spring and freezing later in the fall. Many pointed out how early the ice disappeared in 2023 (around June 9th) compared to before. Anecdotally, someone recalled trying to go swimming during the month of July in the 1970s, but not being able to because the sea was still frozen. Changes in the timing of the seasons has implications on Inuvialuit traditional ways of living. One participant shared that they needed to put their snow machines away the first week of May this year because of the ice melting so early in the season.

"Every season got a meaning. You got your fishing season, hunting season. So, every season got a meaning, but that's getting shorter, it's taking away the availability to get food." (Man, Adult)

The weather changes and its unpredictability has made it harder and more dangerous for some to go out on the land. As noted by a participant, Elders used to be able to predict what the weather would be the following day, but *"it's really hard nowadays"*. Hunters can find their way out on the land and know what direction to go in based on the shape of the snow drifts and of the currents, as well as by the flow of the river. One participant said that, even in the thick fog, he was able to tell he was about 5 miles from Tuktoyaktuk by the changing colour and texture of the ice. By learning this from family members, listening to stories and looking at maps, Inuvialuit know what passages to use and which ones to stay away from. However, changing ground conditions is making travelling harder. People are having to travel using alternative trails, as the ones they are used to are becoming challenging to travel on.

"The trail that we use are different now. Because of the land erosion. Because of the more storms we're getting." (Woman, Elder)

Inuvialuit depend on the weather to travel or to camp. Several participants talked about the differences in travelling on the land, notably the need to be more cautious and aware of unstable grounds and areas thawing out faster. Knowledge of how the snow melts helps to figure out which trail is best to travel on. People also shared having to use different routes now. Quick shifts in the weather, from sunny skies to hail, snow, fog and rain within a 20-minute time frame can turn a usually 2–3-hour journey into a 7-9 hour one.

"When I was younger, we used to go hunting and then fishing and I'd be gone two months out of the year. Now lately, it's kind of, like, on the fence, you know? Sometimes I can go out, other times it seems kind of more dangerous than last year. These would be the same dates, things we used to be able to predict and now it's becoming more unpredictable." (Man, Youth)

Changing grounds

In relation to weather, people have observed impacts of rain on the firmness of the ground. An Elder shared with us that the land by the Pingos was spongier than it used to be, making it a lot harder go berry picking and be more active.

"Nowadays we get rain never like before. We never used to get much rain, maybe once or twice in the summer. We got so much rain last year and the year before and there's nowhere for it to go because there's permafrost underneath. So, it stays in that sponge and the land is just always just wobbling and even other Elders notice it. Because we used to be able to just walk on it. And when I tried, I was just, like, walking on a foam mattress. That's from that rain." (Woman, Elder)

Unstable ground conditions also prevent people from using the community ice house (an underground freezer carved in the permafrost) for fear of it collapsing. Another sign that the ground was getting softer is the number of people reporting that their houses are shifting. Living on unstable and swampy grounds is a concerned shared by participants.

"I'm like in a swamp, so not only is the ground underneath melting and getting softer, it's all that water too I deal with... It goes right underneath my house. Sometimes I'm thinking the pilings that my house is sitting on, I'm thinking one of these times my house is going to drop, you know, and so... That's another thing I noticed, which is probably getting worse cause of the permafrost." (Woman, Adult)

This same person also revealed that they sometimes could not get in or out of their house because it can become surrounded by water in the springtime. Not helping the situation, people observed issues with their houses, which were designed for the South. Indeed, some talked about the creation of 'air holes' (i.e., visible cracks between the walls and ceiling) due to shifting and lacking proper insulation. Someone else observed that the south-facing sides of houses were always the ones that would drop by about four inches. Shifting of the structure impacts residents' ability to open and close doors, affecting their thermal comfort.

"The windows are shifting. Some are cracking and they're losing their sealant inside. So, we do get frost-built on the inside of the windows. The door sometimes can't close properly because of the shifting, so it doesn't help in a lot of ways because we get a lot of moisture buildup and a lot of heat loss." (Woman, Adult)

Many were frustrated by the lack of housing in the community and the rules preventing more houses to be built beyond a certain area because of the threat of erosion. Because of this, some talked about the challenges of overcrowding and associated stress. Feelings of stress were also discussed in relation to the idea of having to physically move entire houses because of erosion.

"Well, moving a house there's always something [that] happens inside your house that causes the stress because, [you have] to pay to get it fixed. And also, the house resettling on the land that it's moved to. It is stressful for sure what with all those being in mind, just because the erosion is so consistent and fast." (Man, Adult)

Lastly, one participant raised a concern about some houses being located so close to the road, and how dust would go into their homes.

"You know when you're driving down the main road, there's lots of houses out by the road. Not even 6 feet away. There's some that are a foot. And that's where I can see some of the concerns, all that dust going there, going into their homes, into the air." (Man, Elder)

People also attributed the fact that there are little to no flowers that grow in Tuktoyaktuk anymore to all the dust. Someone else mentioned that they now avoided picking berries along the highway for this same reason. Speaking of berries, one participant mentioned a new species of berry, suckle berry, that is starting to grow around Tuktoyaktuk. Many talked about the richness of wildlife found in the area. People love living in an area so abundant in animals and plants:

"Whether it is fish, seals, whales, caribou, wolf, wolverine, geese, berries...You name it, we have it." (Man, Elder)

Changing wildlife

People shared with us their observations about decreases in the availability of certain species to hunt and fish, making it harder to pass down traditional knowledge. Some shared their worries about their grandchildren not being able to be off the land people like they are, since sometimes there is nothing to go out for.

"It's hard to teach now, especially if there's going to be hardly any fish, and then you want to teach the young ones. There's just nothing there really, sometimes, to teach them." (Woman, Elder)

People also shared with us their worry about the avian bird flu and about parasites found in fish. Observations on the changes in the skin colour and firmness of some species were shared, bringing forward challenges of food security and ability to eat country food. The rising price of market food was discussed by some, making it a real struggle for community members to feed their families. One person shared that they have had to sacrifice utilities at times (e.g., power and phone) because they could not afford the cost of it all.

During the interviews, we heard about new species finding their way to Tuktoyaktuk, like salmon and beaver. While many questioned why salmon ended up in the harbour, the harvesting salmon was seen as beneficial.

"I don't know why salmon is coming around a little more than previous years, but you know that excites us. I mean, the more new food, the merrier and a lot of people in the community do enjoy salmon." (Woman, Youth)

On the other hand, many were worried about the arrival of beavers, who are cutting down willows, plugging up the creeks and causing the water to be stagnant, drying out lakes, and decreasing the amounts of white fish that could be harvested. Overall, the beavers were described as pests that are very destructive and invasive.

"People really don't realize that water is getting stale. It's getting stagnant, can't move. And once you have the beaver in there, all the other animals and that is going to go bathroom in there and you can't move it. That creates disease." (Man, Adult)

Knowledge and Adaptation

People told us that a lot of their knowledge of climate change was from the time they spent on the land, from traditional knowledge holders, and researchers. The importance of sharing knowledge and collaborating with researchers was talked about during the interviews:

"We want to share knowledge because, you know, [researchers] do all the scientific part, but we've got Inuvialuit living on the land that are so knowledgeable. They may not know how to incorporate them into

the wording of the scientists, but they can share a lot of knowledge, so we've got everyone collaborating and working together. So, it's really nice." (Woman, Adult)

When discussing about shoreline protection, people mentioned the importance of having Elders provide their input and share their knowledge.

"The Elders, way back then – this was about maybe 20 years ago – when we still had the Point and they first put those rocks along the Point, the rip rap, they were really against that… [the Elders] said if they had put the rocks further out then it would have worked. But they put them right along the shore, which just ate up underneath. That was a big mistake, but no one was really listening to the Elders." (Woman, Adult)

Strategies to get more people involved in consultations were suggested by participants. For example, encouraging parents to take their kids with them to increase their levels of involvement in knowing what discussions are taking place about climate change and adaptation. One participant emphasized the importance to:

"Find ways to get the new generation involved because they'll be the next leaders of our communities." (Man, Adult)

Someone else mentioned the importance of encouraging people to share their input during consultations and finding ways to share information from the very beginning: "the earlier the better. Then there's more time to keep it in their minds and think" (Man, Elder). Another suggestion was made to find ways to encourage people to interact with the researchers.

Most people with whom we talked acknowledged the work of the mayor and put towards shoreline protection. Throughout the interviews, there seemed to be a shared desire to see Leadership take a stance on what the community is to prioritize. Even if previous protection measures (e.g., the rip rap or the slabs) have been 'ineffective' in stopping erosion, many still have hope to save Tuktoyaktuk if appropriate actions and protective measures are taken immediately. However, this optimism was not shared by all.

"We're fumbling for like proper solutions, but I haven't heard any real changes." (Man, Youth)

Regardless of the ability of protection strategies to this day, the interviews highlighted that while the challenges posed by climate change today may be different from those of the past, Inuvialuit are resilient people who have been adapting for time immemorial.

"We notice that in Mother Nature and we adapt ever so quickly too. We adapt to things quickly up here just because we don't really have control over Mother Nature and we just learn to accept and really move, just keep trekking." (Woman, Youth)

"I think the main thing that we should be focusing on is our kids, our kids' future. And I think that's important and in turn that would create leaders for our people and we'll need them most." (Man, Youth)

2.
Community Relocation

There has been increasing attention to the possibility of relocating Tuktoyaktuk within the next 30 years because of sea level rise and erosion. Having community members voice their thoughts on relocation is essential if this process aims to be inclusive and community driven.

History of relocation

During the interviews, participant talked about the history of relocation, sharing with us that in the beginning, no one was originally from Tuktoyaktuk. Inuvialuit have roots in various locations such as Husky Lakes, Bailey Island and Hershel Island.

"We came here from this place and that place, those places. So, like the people, like my family come from Husky Lakes. My grandmother comes from Hershel Island. But my grandparents met at Kitti. So, there's nobody that could say they came from here. There's absolutely nobody." (Man, Elder)

The topic of community relocation is not a new one. In the 1970s, financial resources brought in from the oil industry sparked discussions about relocating Tuktoyaktuk to safer and higher grounds. Previous proposals included building a bridge to move the community further away from the erosion.

"He [my husband] was talking about relocation in the 70s when the oil companies were here, and they had money for the community. The impact agreements. So, he mentioned to them, you know that Esso across, why don't we move there? Can you build us a bridge from that closer point and then we could move our community on that side because it's going to erode." (Woman, Elder)

Relocation has been a recurring conversation in the community, as some houses have already been moved further inland to Reindeer Point Road because of erosion. As a result, some expressed a sense of loss as they had to witness the disappearance of land that had been there for generations. People described missing their relocated neighbours and the close-knit feeling they had. In addition to these relocated houses, changing ground conditions have led to the relocation of the Royal Canadian Mounted Police (RCMP) buildings in the past.

While some participants thought relocation should be a 'last resort', others advocated for a proactive stance, suggesting a move before 2030 or 2050 to ensure survival against potential disasters like tsunamis. Some suggested that an immediate solution would be to start relocating just those who are in the most vulnerable locations further inland and to higher ground.

"Maybe not [relocate] the whole community, but ones that are of course close to the point there for sure. That's the most affected in town so far." (Man, Adult)

Feasibility of community relocation

Participants described how the community is actively discussing and planning for potential relocation due to environmental threats. Some see relocation as being inevitable; that it is bound to happen in the face of future projections. Nonetheless, the feasibility of relocation of moving an entire town and its infrastructure were brought up. Indeed, the idea of restarting anew was seen as daunting, costly, and disruptive, particularly for a community of around a thousand people.

"I don't know how they would even do it or where they would even put us. The whole idea of relocating is difficult, like, where would we go? Where would you move all this town and all these houses, all this infrastructure? It'd be really hard to move...Restarting anew would be awful for the community, would be expensive for our government, and in general would be just really, really difficult to move 1000 people, I think." (Man, Youth)

With relocation also comes other logistical difficulties. Participants shared their worry about increased distances to essential services and stores, especially for those without personal vehicles. The move would also require new infrastructure, which added to the worry about the cost of relocation. This includes potential losses of property and the need for substantial governmental support to help people rebuild and adapt. Aside from cost, the practicalities of moving homes, cemetaries, and other structures are daunting and would require substantial effort and resources.

"At least like some type of support or something to help the people come back from something that would be that bad. Relocation is life changing and if that were to happen, there should be, you know, centres for people to get their creativity... I think the main thing that we should be focusing on is our kids, our kids' future. And I think that's important and in turn that would create leaders for our people and we'll need them most." (Man, Youth)

The potential impacts of relocation

Many residents have heard about relocation efforts and express a range of emotions, from acceptance to the hope that maybe it will not happen. During the interviews, the thought of relocation was associated with important consequences for daily life and cultural practices. The community is deeply connected to the ocean, relying on it for traditional fishing and hunting activities. Moving inland would increase the distance to vital and culturally significant resources.

"The Elders and everybody are used to the ocean. They're used to getting the fish. If they move them more inland than they have to travel longer to come down to do their traditional fishing for the beluga, for their white fish and their geese. If they move the community more inland, that's going to take away a lot of the opportunities for the young and Elders to do this. To do this kind of fishing recreational stuff. For providing for themselves." (Man, Adult)

Emotionally, moving means leaving behind a place that holds deep personal and familial significance. For many, this land is where they grew up, built homes, and created memories. Participants expressed the profound stress and emotional toll of such a change.

"It just makes me sad because growing up, my Nanak (grandmother) would always say this is paradise. You know, this is heaven. This is our homeland, we gotta treat it good. And she would always say, I hope it's gonna be here always for you kids [...] Home is just – like I said, it's good to have your native food and, be around your family." (Woman, Youth)

Based on what was shared during interviews, participants were not just worried about the physical move but about preserving their way of life, cultural identity, and social life. Interviewees described that relocating the community would mean losing familiar surroundings, including the view of the ocean and proximity of their loved ones who are buried in Tuktoyaktuk.

"It's really tough to leave where you grew up. It's kind of your sense of home and you've got your relatives buried here. All your family members. You know, you want to be buried where they are, where it's close." (Man, Adult)

When to relocate?

Participant's thresholds for relocation vary widely and were often tied to significant, tangible events or imminent threats. Several participants mentioned specific conditions that would trigger a more serious consideration for moving. For example, one person said that the destruction of key community structures would be a wake-up call, particularly the cemetery, which holds deep emotional significance. Someone else shared that water reaching their house would be the decisive factor.

"I think when the Northern store goes down. Or the Health Center. And you know the cemetery is a sanctuary... when we see the cemetery going down, I think that's when people start to think, oh, this is my reality, this is happening."
(Woman, Youth)

Disasters like major floods were repeatedly mentioned as potential tipping points. One participant said that a significant flood or wind surge wiping away land edges would prompt relocation, while another suggests that a one-in-100-year flood would finally convince people of the need to move, especially since there has not been a significant flood since 1970.

"A big flood. One in 100-year flood. Then people are going to see we need to move right now, you know, and they'll all be on board." (Man, Elder)

Others said that they would wait until the situation becomes critical, such as seeing the water coming closer or experiencing significant high tides and erosion further threatening homes. Overall, there is a general sentiment that while the community wants to avoid being caught unprepared, they also want to exhaust all possible efforts to mitigate the situation before conceding to relocation.

"Like I say, if you have to [relocate], you've got no choice. But right now, I would not want to move."
(Woman, Elder)

Some people consider relocation dependent on external support and readiness, such as government funding and preparation of new living spaces. For example, one participant said that she would only move if the government offered to relocate their house for free. When thinking about relocating, an Elder emphasized the importance of having houses and roads ready before moving.

Some people recognized the potential timeline for these events, predicting that serious considerations for relocation might come into play within the next 10 to 20 years. The urgency is balanced with a hope that thorough research and efforts can provide viable solutions to avoid or delay the need for such a drastic measure.

"You want to see the research. I know that we've done everything that we can before we give up. I think what's important is not giving up, but trying to find feasible or at least you now, valid responses to what's happening here." (Man, Youth)

Where to relocate?

According to participants, the new location should be permanent, high, safe from erosion, close to existing infrastructure, and conducive to traditional activities and community life. First and foremost, the location needs to be permanent. Interviewees emphasized that if the community is to relocate, decision-makers should be confident that they will not have to move again. The new location must be high and safe from potential flooding, with historical knowledge pointing to certain high areas as safe zones. Ensuring the site minimizes the risk of erosion is crucial to reduce the need for future relocations. The new site should also support the community's lifestyle, including activities like berry picking, access to the ocean, and fishing and hunting.

"Make sure that we have our traditional place, traditional activities where we don't have to go way over there to go, set our nets right below there... And make sure that there's no further wave action to erode where we're gonna move. Because if we have to move again, holy smokes, no." (Woman, Elder)

In a new site, access to water remains pivotal, not just for daily needs but also to support traditional livelihoods and cultural identity. Balancing proximity to the ocean with long-term stability highlights the need for strategic planning to mitigate relocation risks.

"I think people would like to be at least near the ocean, but I can see where the problem would be in putting us near the ocean again. It would just be relocating again. Being close to the ocean is integral to a lot of people's identities and what they do in the summertime. I'd say if we could maybe near the ocean if we can and just as long as we're somewhere that has longevity, that isn't going to put us at risk of relocating again." (Man, Youth)

Preserving cultural heritage, especially through Elder care and educational institutions, emerged as a priority during the interviews.

"Programs would be nice for the younger generation to, at least say: 'okay Tuk is not there no more but this is what your ancestors, your generations, did'. It would be nice to try to keep it going even through, you know, certain programs to help them know what we did. Like long ago, it's so different from now, yeah? As I was growing up, it's different so you adjust. But programs to make sure the younger generations at least know what we went through. And if it's possible for them to try to keep it going." (Woman, Elder)

Practical considerations for the new site were also discussed. For some, moving south along the highway was seen as the natural and practical solution due to existing roads. Other participants mentioned their thoughts on relocating to Reindeer Point Road or towards Husky Lakes. Reindeer Point Road was favored for its higher elevation and distance from the ocean, which provides better protection from erosion.

"I think Reindeer Point, but then I don't know. It'd probably have to be more up this way. Husky Lakes area, maybe. We might be living in Husky Lakes. It's beautiful there."
(Woman, Youth)

Husky Lakes, while beautiful, might be further than necessary for practical purposes. The area between these two locations, about 15 kilometers out, is considered a good middle ground. Alternatives also include high areas across the harbor or near the Northern Transportation Company Ltd. operating base.

"From Reindeer to Husky, in between that area. But probably not that far. Not super close to Husky Lakes turn off area. I don't think we need to go that far. Maybe 15km out max." (Woman, Adult)

Overall, the characteristics of the new site for relocation stress a balance between practicality, safety, environmental suitability, and maintaining the cultural and social fabric of the community.

Community decision-making

Anticipating future challenges underscores the importance of information sharing, thorough planning, and steadfast execution to ensure community stability. It was clear that there needs to be a plan in place to undertake the process of relocation. Many participants acknowledged that while some steps have been taken, the overall relocation process is ongoing and needs more comprehensive planning.

"I think the priority's start taking the plan that they have in place which they adopted and start putting it and start using it, and say look, people of Tuk, we're stuck in a hard place and this is what we have to do, we have to move south. Take it along the highway and move south." (Man, Elder)

Aligning actions with the existing comprehensive community plan is deemed imperative due to limited alternatives. Honest and transparent information sharing from local leadership — mayors, council members, and administrative officers — about the feasibility and support needed for protecting vulnerable areas and community relocation was discussed as being critical.

Relocation is a sensitive topic for many, which is why early and continuous community engagement was discussed as being essential to foster community understanding and support. One participant made it clear that any discussion or decision about relocation should be validated through direct consultation with Elders. Ongoing dialogue that emphasizes the collective benefits of relocation was proposed as a strategy for reducing the risk of misinformation and clarifying community goals. Comprehensive maps and graphs are needed in order to help people get a clear understanding of the risks and need for adaptations such as community relocation.

"We can't pick a spot unless we see it. We need maps." (Woman, Adult)

Opportunities of relocation

Although few, some people that we talked to identified opportunities that could arise with community relocation. Participants envisioned positive opportunities for future generations, including the prospect of safer homes and grounds in a higher, more secure location. Relocating was also talked about as being an opportunity to involve community members in shaping a new community that could have new and potentially larger buildings. The idea of starting anew was appealing, with possibilities for new infrastructure alleviating current stressors in the community.

"Just everything new would be so nice, like a new school, a new Health Center. It's just be nice to see new buildings, like apartment buildings, especially because here we'll wait years for a house on the housing list." (Woman, Youth)

In discussing relocation and the opportunities to improve community life, people expressed their desire for more accessible health care and amenities (such as stores). In addition, a new location would have to address safety concerns, encompassing not just physical security (e.g., having safeguards against erosion) but also ensuring the preservation of traditional practices and places.

When it comes to other types of infrastructure, one participant emphasized the need to anticipate future inland roads to support community growth. In addition to this, separating industrial areas from living areas was also discussed as a way to minimize noise and pollution. Others discussed essential community facilities—such as health centers, schools, and police services— which are deemed foundational for community resilience and sustainability.

"Think about the things that will help us stay alive; keep us sustained. For one, the Health Center. The second one would be the grocery stores, and then the police, and then the school. Have at least a few facilities that will help keep us sustained and the hamlet with all their equipment. We need all these big machinery to help us create a new community." (Woman, Youth)

Educational opportunities for youth also came up as opportunities of a relocated community, aiming to foster leadership among youth. Some participants shared their vision for establishing a real university that integrates traditional knowledge alongside western education, potentially attracting both local and outside learners.

When thinking about the current location of Tuktoyaktuk, some proposed turning it into a hinterland for traditional activities like fishing and setting up temporary lodging for seasonal practices. These opportunities reflect a proactive approach to community planning and resilience-building in the face of environmental challenges.

"Programs would be nice for the younger generation to, at least say: "okay Tuk is not there no more but this is what your ancestors, your generations, did". [...] As I was growing up, it's different [from now] so you adjust. But programs to make sure the younger generations at least know what we went through. And if it's possible for them to try to keep it going." (Woman, Elder)

3.
Community

Adapting to climate change and planning for relocation is an opportunity to tackle other spheres of community life. Understanding the aspects that make Tuktoyaktuk a special place to live, identifying changes in community life, and documenting elements that are missing or needed can be incorporated in adaptation planning, both in place and when thinking about relocation.

What community members love about Tuktoyaktuk

During the interviews, we asked people what they loved about Tuktoyaktuk and what makes it a special place to live. Overwhelmingly, people talked about the sense of community, connection to culture, and location as aspects that are cherished about the place they call home.

Sense of community

Tuktoyaktuk was described as "a one-of-a-kind place." Many talked about the friendly, welcoming, and close-knit nature of the community. Community members demonstrate their care and attention by being in contact with each other and knowing their whereabouts, especially when people are on the land. Being able to meet up somewhere comfortable to sit and share experiences on the land is also cherished. In addition, many participants prided themselves on being able to help others and sharing traditional foods.

Connection to culture

Connecting with the land and thinking about all the Elders that have travelled on it was also described as something making Tuktoyaktuk a unique place to live. The land was described as healing by a participant. Connecting past generations to the present and future generations was also linked to the integrity of Tuktoyaktuk and of Inuvialuit culture more broadly. Echoing this thought, one participant said:

"With Inuvialuit culture, we take that seriously here and we really consider our mom and dad and our Elders here. I need to carry that integrity onto the next generation for them to really appreciate every little thing in this community." (Woman, Youth)

The location

The area where the community of Tuktoyaktuk is located is seen as being the heart of the Inuvialuit culture and people. Many described the proximity to the ocean as being central to community life. Several participants also talked about the harbour and access to fishing as the reason for living in Tuktoyaktuk in the first place. Living on the ocean is integral to people's identities and has shaped the way Inuvialuit live. Many cherished the ease of year-round access to the land and waters and to hunting and harvesting.

"We're so close to the ocean, and the beach, and the water, and it's a big part for our community. A lot of people eat our traditional food, whether they are participating in getting it, or preparing it, or eating it." (Woman, Adult)

In addition to being by the water, others talked about how nice it was to have a view of the Pingos, so much free space, quietness, and fresh air. Many love Tuktoyaktuk because it is the place they were born and grew up.

While sitting in people's houses during the inteviews, many talked about how much they love being able to see the water and watch wildlife from their own window. Having their house near the harbour was also a positive factor for some, since it meant having direct access to fishing and cutting up whale. Other positive factors about the location of people's houses were (in no order of importance): living in a quiet area, having good and respectful neighbours, and having enough

room to run and raise dogs. One participant, who did not have a vehicle, talked about how nice it was to be living in an *Akulik* (central area), and to be within walking distance from the school, the Point, and the stores.

Changes in community life

During the interviews, it was made clear that community change is not only linked to climate change; there are other aspects of Tuktoyaktuk that are changing, such as the presence and influence of technology, tourism, and the changes brought by the Inuvik to Tuktoyaktuk highway (ITH).

Technology

When talking about change, many talked about the impacts of technology on community life. For example, some mentioned that, back in the day, kids used to be outside all the time. However, due to the prevalence of technology, they notice fewer young people spending time outdoors. Someone spoke about how social media allowed youth to know more about how things are changing, but at the same time, prevented them from experiencing and understanding these changes. Overall, we heard a desire for community activities to get youths "off their iPads".

"I think everything has impacted the youngsters nowadays. And with everything that's here today, especially the Internet, they'll tell you that "I've seen it on Internet" – that things are changing – but are they actually going out and participating and doing it? It's different." (Woman, Adult)

While some of the negative impacts of technology and social media were discussed, people brought up innovative platforms such as SIKU, the Indigenous Knowledge Social Network app, that contributes to monitoring changes in the landscape. SIKU was described as "the Facebook for hunting", allowing hunters to access and post information about any changes they see while they are out on the land, like cracks in the ground that did not use to be there. Individuals and groups such as Smart Ice utilize this platform, making it a good overall resource. Platforms such as SIKU are a great example of bridging technology and traditional knowledge. Nonetheless, one participant identified a need to provide such platforms for younger people or for those who do not go on the land.

Tourism

Since the construction of the ITH, Tuktoyaktuk has been a destination for many tourists wanting to drive to the Arctic Ocean. In 2018, following the opening of the ITH, one participant counted 60 vehicles at the Point at the same time, some staying for a week and others up to a month.

"This is a place where everybody wants to come, right? This is the destination. And in saying that, we are not ready, you know, we don't have the infrastructure. If you look at the Point – and you've seen it right – it's taken over by the tourists, and that was a traditional harvesting area. That was a fishing area." (Woman, Adult)

The lack of infrastructure to accomodate tourists was seen as an issue (e.g., there are no proper coffee shops, RV park, campgrounds, modular shower installations or rules for tourists). One participant felt like tourists were "taking over", as current tourism accommodations are located by a traditional harvesting area in a place that community members visit daily. Having campgrounds and other camping accommodations situated elsewhere would be appreciated by residents. In addition to relocating the campgrounds, community members want to feel secure in knowing that others will not come to Tuktoyaktuk to exploit and use the land.

"We don't want people coming in and settling wherever, you know, because it's our traditional land, and we want to keep it intact and we want to keep it Tuktoyaktuk. And we want to be able to go out freely hunting, trapping, fishing, you know, and just be mindful of our land cause it's our home. It feeds us." (Woman, Elder)

The ITH

While there is a need to address tourism and infrastructure, people also appreciate being more connected to other places and people. For example, being able to drive south and go on a holiday, or having friends and family members come up and visit. The highway is also an important asset for getting food and produce brought to the stores year-round. Before the highway, the ice road was only useable for 4 months out of the year; charter flights and barges were needed to bring freight the rest of the year. While the highway makes food and other goods more accessible, it also makes it easier to bring harmful substances in the community.

People described the positive and negative impacts of the highway on the health and well-being of their community. On one end, the highway allows for Tuktoyaktuk to be more open and accessible to the rest of the world. On the other, some participants shared how easy it was to get alcohol now, leading to substance misuse, arguments, fights, and illnesses. One parent shared their worry about their kids growing up in the community because of this, and not wanting them to be surrounded by other youth who smoke and drink. While challenges related to alcohol and drug use being brought in by the highway, a feeling that "so far, the good outweighs the bad" remains.

What is missing or needed in Tuktoyaktuk

Participants had the opportunity to voice aspects that they believe are missing or needed in the community. While these can be incorporated into the design of a new relocation site, some can be addressed in the short and medium term.

Health and social services

There are gaps surrounding the availability of health care and social services in Tuktoyaktuk. When discussing physical health issues, participants identified a need for better equipment, appropriate facilities, and specialists in Tuktoyaktuk. In terms of mental health care, a lack of services specifically for youth, was voiced.

"It's just the lack of support systems here for younger people. For people to get in touch with their issues and with that they're able to take better care of themselves. I just feel like if youth had someone or something to help them look forward it would help them become better, more productive people. And, in turn, we could start having more and more leaders helping us figure out what we have to do." (Man, Youth)

Others mentioned how having a rehabilitation center for those dealing with addictions or a place where people can go when they are feeling down could be beneficial.

"I struggle with my own addictions and whatever. And I wouldn't mind to talk to somebody once in a while. Or just go somewhere, you know, to hang out and just, you know, feel Ok... Yeah, stuff like that. Cause we're losing lot of our people to stuff like substances." (Woman, Youth)

Talking about factors that contributed to positive mental health, another participant mentioned how inspired they were by knowing about ancestors' traditional ways of living.

"They always inspired me, their efforts and their strength, their resilience. I've been inspired by that in a way and kind of keeps me going. It helps a lot." (Man, Adult)

We heard some people talk about finding ways to reconnect with spirituality as a way to cope with challenges of daily life. One participant mentioned that rather than going to church, they go on the land. Going on the land is *"just healing [be]cause it reminds you of your parents, your grandparents, you know?"* (Woman, Elder). Yet, as one participant mentioned *"That's one thing we don't see anymore much, is the families spending their time on the land like my parents you would take us."* (Man, Adult). People talked about the need to find more ways to get the younger generation to learn about their ancestors and keep Inuvialuit culture going, especially if the community were to be relocated elsewhere. Few participants mentioned the privilege of being able to learn and speak Inuvialuktun, which is not something many people have growing up.

'On the land' programs across all seasons were not only discussed as a need for youth, but also for adults and Elders. In general, people want programs to spend more time on the land (e.g., two weeks rather than 4-5 days). In conjunction, a desire for more activities within the community, such as games for the younger generation or daily outings for Elders, was expressed. People emphasized the need to educate people on traditional knowledge and skills that were lost by many because of residential schools. For example, having classes incorporated in the curriculum that focus on plants and uses of plants, learning other soft crafts (e.g., sewing parkas and making mukluks), and learning hunting skills.

Education/Trades

During the interviews, many spoke about the need to have more education opportunities – both traditional and western – as well as more teachers from the North, who are aware of Inuvialuit culture and history (rather than teachers from the South who are southern oriented).

"Our children, they need to learn. They need to learn so they can get good jobs, so they can be able to get what they want and need. And just to learn as much as they can. Whether it's traditional or any knowledge that would be useful to them. And I think that Traditional Knowledge is priority for most every young person, like they should learn that and gives them a better sense of where they came from them and gives them a better sense of how to fix a problem if it comes up in the future." (Man, Adult)

Participants talked about the need for more courses or trades for those who are out of school and don't have a job:

"Just give [the Youth] more positive things to try to find and do."
(Woman, Elder)

One participant, who was working towards their advanced drone license, wished for more people to obtain their drone licensing as either a hobby or a job and for community members to be able to provide the drone documentation for their own community. Others talked about the importance of learning how to maintain and operate machinery, as a broken boat, skidoo or quad prevents people from being able to go anywhere.

"The things that the young kids might be missing is, you know, how to work on a snow machine that they buy, an ATV that they use, so they can keep operating instead of just [saying] oh it doesn't work, I need to get a new one." (Woman, Adult)

Infrastructure

People talked about their desire to have new or renovated buildings. Lack of housing, leading to overcrowded households, was among the biggest challenges related to housing that was discussed. One participant mentioned living with over 10 people in their house. Living in overcrowded households leads to challenges such as running out of water, always having full sewage, and not having any personal space, or place to store personal belongings. An Elder mentioned a desire for Elders to have better places to live in.

"As an Elder, living with a whole bunch of young people next door to me is pretty tough, because they're partying [a lot] and nothing is done. Us Elders should have better places." (Woman, Elder)

Many spoke about the existing barriers accessing public housing, including being on the waitlist for several months, to several years. One participant mentioned being on the list for 6 years. Someone else talked about the feeling of constantly having to fight for basic needs, such as housing and income support:

"I fought for my own place. I waited nine months. Some people up here in the North wait four to five years, maybe even 10 years. So, I really pushed for my own place. I even went to housing meetings [several] times." (Woman, Elder)

The long waitlist was attributed to the barriers of current housing requirements, such as living in the community for 6 months prior to being able to be waitlisted. Housing and accommodation shortages were also linked to challenges related to erosion. Due to the threat of erosion near the point, it is forbidden to develop any new infrastructure beyond a certain area.

In addition to housing, transportation infrastructure and availability of products sold in the local stores were brought up during the interviews. Community members talked about how nice it would be to have a regular bus service for people in town and those living in Reindeer Point. When it came to the stores, some shared their desire to have a broader range and sizing of clothing available, better furniture selections, or being able to buy parts for their machines.

Lastly, many people talked about the need for more recreational infrastructure. The printing center was mentioned as a place where youth and adults alike can come and make art for free, which was seen as a productive way to spend time together and be creative. Participants also talked about the arena, where people skate and play hockey as a place to keep out of trouble. Others mentioned the need for more infrastructure for the children, such as a functional swimming pool. As explained by a participant, currently, the swimming pool behind Kitti Hall is in a state of disrepair; its location gets flooded at times, which makes it unusable.

"It would be so nice to have a big swimming pool that families can take their kids, you know, families there. And that might alleviate a lot of the social problems too. Things like that, you know. A place where we can bring our kids. Where there are programs. We need programs as well, and skilled, trained people to run them and to teach people how to run them." (Woman, Elder)

People also enjoy doing picnics and swimming at the beach strip behind the RCMP: *"it's our only recreational in-town beach"* (Woman, Adult). When reminiscing about childhood memories, several told us how that beach used to be sandy and people would go there to run, play tag, and get some exercise. However, this is also an area of town that is rapidly eroding, as we discussed in greater details in section 1.

Conclusion

While the challenges posed by climate change today may be different from those of the past, Inuvialuit have been adapting for time immemorial. Today, many types of changes are happening all at once, and faster than ever. Few of these changes can be discussed in isolation from each other, as illustrated by the many overlapping themes presented in this report. Central to all themes and discussions was the need to connect to culture and Inuvialuit ways of life.

The first section of this report focused on people's observations about change, including the type, the location, and the impacts of change have had–and are having–in people's lives. Changing weather, ground conditions, and wildlife are limiting people's ability of to travel safely and to pass down their traditional knowledge. Our analysis highlights the importance of involving youth in discussions around climate adaptation and allowing Elders share their knowledge and input about different strategies. While protecting in place remains a priority in the short term, many acknowledged the need to have a clear and transparent relocation plan in place.

The second section discussed the challenges and opportunities related to relocation. Concerns about the feasibility of moving an entire community and its impacts on community life and traditional practices were voiced. While some are hopeful to avoid relocation altogether, others believe that it is inevitable. People shared what would need to happen for them to consider relocating, including losing critical infrastructure to erosion and experiencing extreme flooding. Initial criteria were also shared with us about a new location site: it needs to be permanent, located in higher and safer grounds, and ensure direct access to traditional fishing and hunting areas. Participants voiced their hope that relocation could create the opportunity to improve community conditions.

The third section described different facets of community life, from what people love about Tuktoyaktuk to changes brought forward by technology, tourism, and the highway. People shared elements that are missing and needed in the community, such as better health and social services, ways to connect to culture, further educational opportunities, and investments in housing, transportation, and recreational infrastructure. Addressing these represent opportunities for community life to be improved. While some improvements can be made in the short-term, others can be incorporated in relocation planning.

As final words, the hard work put in by Tuktoyaktuk's Leadership is lending itself to a bright future for the community. The town getting busier and busier every year, with more opportunities coming through, was seen as a positive sign for the future of Tuktoyaktuk.

Glossary

Throughout this report, we included, whenever possible, the appropriate Inuvialuktun word to describe the areas in the community. These Inuvialuktun words are from a map originally created by Joe Nasogaluak Jr. in collaboration with W.F. Baird and associates in March 2022. The information was gathered from multiple sources, from Traditional Knowledge to books, and community Elders. The original map was created as a source of information to contribute to understanding and learning about the places in the community. The information included is based on the best knowledge available and is open to corrections with a clear understanding. The original map was shared as a resource with our team for us to include Inuvialuktun names of places in our report. Not all words appearing in the original map are included in this list.

Akulik (a-koo-lik)
A central part of an area. People who used to live in the area wre called Akuleet (a-koo-leet).
(Source cited in the original map: Joe Nasogaluak Sr.)

Avatani (a-vaw-taw-nee)
An area designing the outer edge. People dwelling near the ocean side were called Avatanitat (a-vaw-taw-nee-tut).
(Source cited in the original map: Nuna Aliannaituq)

Iluviksivik (iloo-vik-see-vik)
A burial area.
(Source cited in the original map: Traditional Knowledge)

Nuuvuraluk (noo-voo-ga-look)
Means a point across Tuktoyaktuk Point, near Noah Felix camp.
(Source cited in the original map: Nuna Aliannaituq)

Tuuktuuyaktuuq (took-too-yuk-tuuq)
Derived from the word tuktuuyaq. Meaning resembles a caribou. When the tide was low, travellers in Qayaqs coming to the harbour to fish for herring would notice the rocks glittering from the light of the afternoon sun. The reflection of the light made it seem as if the rocks were caribou swimming.
(Source cited in the original map: Joe Nasogaluak Sr.)

Quinivak (quee-nee-vuk)
A place that can be ticklish or scary due to the high willows that make eerie sounds from the wind.
(Source cited in the original map: Joe Nasogaluak Sr.)

“I only see growth [...]
I only see prosperity coming
into future for Tuk.”