

# Digital Technology Adoption in Northern and Remote Indigenous Communities in Canada

## Appendix 5: Key Informant Interviews in Iskut First Nation, British Columbia

Prepared for Innovation, Science and Economic Development Canada (ISED)



March 31, 2016

**First Mile Connectivity Consortium (FMCC)**



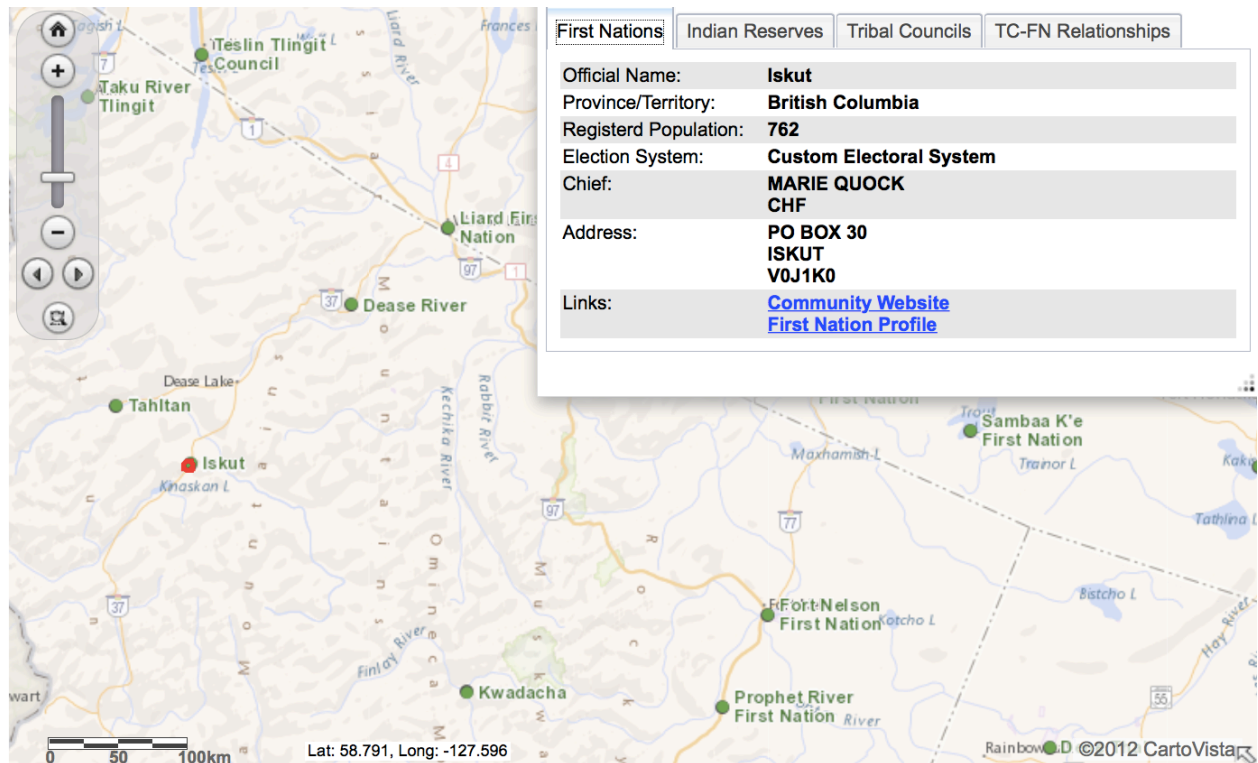
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## Key Informant Interviews: Iskut First Nation, British Columbia

### 1. Background Information about The Community:

**Iskut First Nation** is a Tahltan community in the Stikine region of north-central B.C., about 500 km north of Terrace. The community is an hour and a half drive from the town of Dease Lake (B.C.) and it is accessible by Highway 37.



From INAC's First Nation Profiles Interactive Map at <http://fnpim-cippn.aandc-aadnc.gc.ca/index-eng.html>

Iskut is connected to ADSL Internet infrastructure owned and operated by Northwestel. The network was funded through a 2009 grant from the First Nation Infrastructure Fund, and connects approximately 109 houses and several community and public service institutions. Connectivity is also available via satellite Internet provided by Xplornet.

The First Nations Technology Council (FNTC) works with Iskut to deliver technology training and to explore opportunities for improved connectivity and sustainable approaches to infrastructure management and operations. Denise Williams, Executive Director of FNTC and FMCC research team member, helped connect to this community.

The FMCC project researchers do not have an established research relationship with Iskut. However, Denise has worked with the community, and with the Tahltan Central Government, on technology initiatives in the region. She connected us with Calvin Carlick, Executive Director of the Tahltan Central Government and a champion of digital technology.

**Population:** As of January 2016, the population on the reserve was 320. Approximately 441 additional band members live off the reserve.

**Distance to major services:** The reserve is linked to other locations in B.C. by paved road.

Nearest town: Dease Lake, B.C., 84 km away.

Nearest airport: Eddontenajon/Iskut Village Airport (in the community).

Nearest town with provincial government services: Dease Lake. The closest mid-sized town is Terrace, B.C., about 500 km south (a six and a half hour drive).

**Health services:** Iskut Valley Health Services is a health centre located in the community. The Stikine Health center in Dease Lake offers medical services and a pharmacy, and is complete with X-ray and lab.

**Education:** Grades kindergarten to grade 8 are offered at Klappan Independent Day School in the community. For high school, students go to Dease Lake School (K-12). There is a Post-Secondary Student Support resource in the community. College courses are available at Northern Lights College in Dease Lake.

**Income and Employment:** Income earnings from 2011 are not available. Average total earnings in 2006 were \$25,110, compared to B.C. average total earnings \$34,519. Major sources of employment are agriculture and resource-based jobs, manufacturing and construction, transportation and warehousing, other services, and trades. The unemployment rate in 2011 was 26.7 percent. Forty-seven percent of the adult population had no degree, certificate or diploma in 2011.

## **2. Communications Facilities and Services:**

The main providers of residential communications services are Northwestel (a Bell Canada subsidiary) and Xplornet. Northwestel provides: landline, cable TV, and Internet. Xplornet provides satellite Internet for some businesses and households. No mobile phone service is available in the community though many residents own cell phones with Terrace or Vancouver numbers due to frequent travel outside the community. In Iskut there are some shared Wi-Fi connections that people access. These access points are located at different community and public service institutions in Iskut that are connected to an ADSL network that is owned and operated by Northwestel.

Until 2010, the only high speed Internet service available in Iskut was from Xplornet. The system cost \$400 to install, plus approximately \$100 per month for service. Users experienced severe latency, a technical challenge for some applications such as Skype. Also, the speed was slower when many users came online (such as at night). A technician was located in Dease Lake, and would drive to Iskut to fix and install the systems when required.

In 2009, the Iskut Band Council's economic development officer in partnership with a technology consultant from Northwestel prepared a proposal for funding to install ADSL to the First Nation Infrastructure Fund (a funding program of Aboriginal Affairs and Northern Development Canada). The project was supported by the Iskut Band Council, which recognized the importance of high-speed internet for the community. The Fund provided \$100,000 to establish a point-of-presence in the community and build relay towers for a backhaul link. Last mile local connectivity was provided through the existing telephone lines in the community. By February 2010 the community (109 houses plus offices) had access to the Internet over ADSL.

The local network is now owned and operated by Northwestel. Although the band considered hiring a third party to build the network and operate an ISP, they decided against that approach since they would have had to address maintenance, repairs and quality of service themselves, a challenge given a lack of local technical capacity.

Local customers in Iskut pay Northwestel directly for the service. They can choose from several packages – for example one key informant paid \$80 per month. A major challenge for residents has been the data caps and the high overage fees. One key informant stated that he paid \$1,400 the first month he had service in Iskut, and despite disputing the bill and filing a complaint with the CRTC, ended up paying the bill. Northwestel now offers 3 options for Iskut, the most expensive being \$63 plus tax for 5 mbps down/512 kbps up service with a cap of 125 GB per month plus \$2.50 per additional GB<sup>1</sup>. In one informant's words: "People are 'Power Users' compared to people in cities. They don't have local shops – they shop online. Their whole life is online".

### 3. Research Methodology:

In Iskut, we used a methodology of semi-structured interviews with key informants from key institutions including the band office, education, health care, and local businesses. The interviews were conducted primarily by telephone, with email follow-up in some cases. Interviewees were to be chosen in consultation with a community-based research coordinator.

Interviews were conducted with:

- The former economic development manager of Iskut, now executive director of the Tahltan Central Government;
- Assistant band manager: responsible for human resources, payroll, accounting, mentorship, other duties;
- Education manager: oversees elementary school and staff; the education budget (largest budget of the band); member of the BC First Nations Education Steering Committee (FNEESC); member of Stikine District 87 school board;
- Health director, Iskut: oversees health programs, clinic, nursing, home care, patient travel, mental health, Head Start, dental program;

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<sup>1</sup> <http://www.nwtel.ca/shop/internet/plans-rates/iskut>, accessed March 18, 2016.

- Principal of school, Iskut;
- Two high school teachers from Dease Lake school who teach students from Iskut;
- A tourist lodge owner;
- Northwest Community College representative in Dease Lake (also Iskut resident)

We were unable to reach other tourist lodge operators, as their business is seasonal, and they are not available during the winter. The band assistant manager said that the local store does not use the Internet for its business activities. We also contacted a person from Iskut who exhibits her art of Facebook, but she said she has not lived in the community for more than a decade.

Compared to our experience in Timiskaming, we faced several challenges in this process, which may be partly due to the lack of a pre-existing relationship between our ISED research team and the community of Iskut. As discussed below, this process should be facilitated by a community-based research coordinator. External and remotely-located researchers must also be cognizant of the time and resource pressures placed on participating communities. Small, remote communities are already under-resourced and must address competing priorities. Further, research initiatives must be designed to demonstrate and provide positive and useful outcomes for participating communities.

As discussed below, this process must be facilitated by a community-based research coordinator (a key finding that also came from our work in Timiskaming). External and remotely-located researchers need to be cognizant of the time and resource pressures placed on participating communities. Small, remote communities are already under-resourced and are dealing with competing priorities, and so appropriate supports need to be in place before data collection begins. Further, research initiatives must be designed in ways that clearly demonstrate and provide positive and useful outcomes for participating communities.

#### **4. Community Engagement:**

Community engagement is a critical component for undertaking any research in every Indigenous community. Guided by the principles of OCAP and the federal government's Tri-Council's ethics requirements, the FMCC research team carefully followed and respected the directions provided by regional and community leaders throughout the entire project. Understanding the different steps undertaken and the reasons for these steps is complicated and requires a lot of detail. We try to present each of the steps involved so readers can better understand the complexities and opportunities for doing this work with these rural and remote communities.

As noted above, a key lesson learned from this project was the need to draw on existing relationships with communities to support remote research initiatives. Since the research team had not previously conducted research with Iskut, we spent more time on relationship-building with a potential community partner in BC. Along with the time and resource pressures that



residents of small remote communities face on a daily basis, many northern Indigenous communities in BC are currently engaged in major resource development initiatives taking place in their territories, resulting in additional time constraints.

Research team member Denise Williams connected us with the executive director of the Tahltan Central Government (and a former resident of Iskut, now living in Terrace, BC), who was referred to us by the president of the Tahltan Central Government. These connections were facilitated by telephone discussions and emails initiated by Denise, who knew these contacts through her work at the First Nations Technology Council. Denise provided them with an overview of the ISED project by email.

After this initial contact, ISED researcher Rob McMahon followed up to set up an interview with this contact and discuss next steps to recruit key informants from the community. In the interview, he provided information on the history of connectivity in Iskut, as well as about his experience with digital technology adoption and use in the community. This information is presented below.

As in Timiskaming, our planning discussions involved developing various materials associated with the research, including the background and interview plan noted above, the consent form for interview participants and an interview list to input names and contact information. Later, we adapted the interview list to include suggestions for potential community contacts in different sectors including health, education, Band administration and economic development (with names and contact information sourced from the Iskut community website).

Following our contact's advice and our team's ethical position with regards to conducting community research, we decided not to contact anyone directly until we had the community's consent. This process was delayed because of the many responsibilities and commitments of the Tahltan executive director, who had said he would contact the band in Iskut and explain the project. Finally, he suggested that we contact the chief of Iskut First Nation directly. She responded very quickly, and approved our research.

## **5. General Comments on the Key Informant Interviews:**

After several discussions the ISED research team members decided that it was important for our research objectives – and for the long-term goals of research in partnership with Indigenous communities – to ensure that we conducted research with the clear consent of participating communities. This approach also follows the approach established in our research proposal regarding the need to respect OCAP (Ownership, Control, Access and Possession) principles and respectful research. Rather than pressure our community-based research coordinator to provide us with names and contact information, or directly contact community members without the coordinator's clear support, we decided to wait until we received approval to move forward. This process delayed commencement of community interviews, but we were able to complete the task within the timeframe of the project.

The First Mile approach to research and community-driven technology development stresses the need for internally generated rather than externally imposed policy solutions. Research is a component of that process, and pressure on community members may undermine support for the First Mile (including the concept and approach) over the long term. We are learning about the need to design research projects to adhere to the needs, requirements and resources of participating communities as an outcome of an established and reciprocal relationship, rather than imposed research requirements generated by third party organizations. It has been difficult to achieve these relationships without the ability to visit the communities and meet with key officials. However, we were able to complete the key informant interviews.

## **6. Summary of Key Findings**

It was possible to do the key informant interviews by telephone. Participants were generally willing to respond, although in some cases several call backs were required to reach the right person or find a convenient time. Some respondents also offered to follow up with additional information by email.

Although located on a highway, Iskut is very isolated. The nearest high school and doctor are 87 km. away in Dease Lake. The nearest hospital, commercial airport, and bank and other major services are in Terrace, 500 km. or six and a half hours away by car. There is no mobile phone service, although many residents have mobile phones for use when traveling, and can use them with Wi-Fi in some locations in Iskut.

The ADSL network, which was installed with funds from the First Nations Infrastructure Fund and is operated by Northwestel, is used by all of the band organizations as well as residents in Iskut. Key digital applications for the band are email, payroll, online banking and accounts payable, and filing reports – particularly with TriCorp (The Tribal Resources Investment Corporation), which provides a wide range of financial services to First Nations in Northwestern British Columbia, based in Prince Rupert. The band also is raising money for a new arena through Facebook bingo.

The tourist lodge uses an Xplornet satellite link for email, reservations, and access to government services.

No organizing training in digital technologies is provided. Comments included: “They all know already” and “I train myself.” Technical support for the band’s equipment and local network is provided by a firm based in Terrace that is available by phone and makes monthly visits. Xplornet provides technical support by telephone.

Community access to computers and connectivity is available but limited. Computers and a printer are available at the band office. Wi-Fi is also available at the community hall. The school’s library is open only to students and education staff, and closes at 4 pm. The tourist lodge runs an



Internet café at its store during the tourist season. High school students who must attend school in Dease Lake can use laptops and go online at school after hours. There is also community access at the Dease Lake Education Centre operated by Northern Lights College. A high school teacher stated: “I would say students are not expected to have high speed internet at home, but it does provide an advantage to them, provided they are using it as required.”

Some residents have taken distance education courses online from various BC institutions. One respondent completed a Bachelor of Commerce degree online. Adults generally study at home, although some band employees may use facilities at the workplace.

The teachers at Klappan School use the Internet to obtain material for classes. However, the principal stated: “Internet videos etc. are very difficult to show in classes due to the poor internet connectivity....” In contrast, teachers at Dease Lake School do use the Internet in teaching.

Neither the local teachers nor health centre employees participate in webinars or other professional development activities online. The education manager pointed out that a teacher would have to take a week away from teaching to attend a meeting in Vancouver because of the time needed to drive to Terrace and fly to Vancouver.

However, high school teachers at the school in Dease Lake do participate in continuing education or other professional activities online. A Dease Lake teacher notes: “I am part of a group of teachers taking part in a group mentoring project where we create a virtual learning environment and conduct Skype and Blue Jean meetings to facilitate our professional development.”

While the Iskut band and the Tahltan Central Government have websites, Facebook is the most popular means of sharing information on jobs and other current information. One respondent stated: “Facebook is where everyone gets their information.” The tourist lodge uses its website for marketing and reservations.

Although bandwidth and reliability seemed adequate for basic business and organizational tasks, users think there is not sufficient bandwidth for some applications. The health centre has not used the telehealth videoconferencing equipment that was installed. The school principal said ““The quality of our Internet service makes it very difficult to use the Internet for educational purposes. It is unpredictable and unreliable ....”

Affordability remains an issue. Some respondents noted the high overage charges for Northwestel’s Internet packages, although Northwestel has recently changed its offerings and includes more in its monthly caps (see above). The lodge owner stated that Xplornet’s charges were high, but the service was necessary to operate their business. Quality of service and bandwidth appear inadequate for some online educational and healthcare applications.

Concerning the impact of connectivity, the assistant band manager said that the band saved time and money with direct deposits and filing reports online. They are also able to raise money through Facebook bingo. Another informant said that using the Internet cut down on costs, and allowed sharing information and improving coordination. “Logistics have improved a lot.”

The tourist lodge owner stated that Internet access saves time, but is expensive.

Respondents generally think that Internet is important to Iskut and remote communities. One informant stated: “People are ‘power users’ compared to people in cities. They don’t have local shops – they shop online. Their whole life is online”.

Another stated “Technology is a benefit for isolated communities,” and added “Technology has taken over everybody’s lives.”

## **7. Summary of Responses:**

The following is a summary of responses from the key informant interviews.

### **Technology used to go online:**

All of the band offices and services, including the health centre and school, use ADSL from Northwestel (as described above). The tourist lodge, which is not connected to the ADSL network, uses Xplornet.

### **Devices used to access the Internet:**

The band’s staff and tourist lodge use desktop and laptop computers. Residents also have tablets and smartphones; smartphones can use only Wi-Fi, as there is no mobile service in the area.

### **Training:**

No one provides training in using digital technologies. One respondent stated: “They all know already.” Many are “power users.” One informant stated that at some point, the band had provided training in basic computer use for elders and others in the community. The lodge owner stated: “I train myself.”

### **Technical Support:**

The band does not have any onsite technical staff. It contracts with a firm in Terrace that provides technical support. The firm can do remote diagnostics. Its staff visit about once a month and can provide repairs and service and in-house networking.

The tourist lodge does not have any technical support. “If I need technical help, I call Xplornet, and they help me through it.”

**Main ways that organizations use digital technologies:**

The band manager said she does payroll electronically. The band uses Paydirt software locally, (not online) to manage payroll, benefits, deductions, etc. She pays 45 employees with direct deposit through RBC Express. She also manages accounts payable electronically, and pays bills online.

The band uses the Internet for reports to government agencies such as INAC and health agencies for grants. It does all reporting online to TriCorp (The Tribal Resources Investment Corporation), which provides a wide range of financial services to First Nations in Northwestern British Columbia. It is based in Prince Rupert.

Facebook is important for organizations and individuals: The band runs Facebook bingo to raise money for a new arena; it raises \$200 to \$300 per week. There is an Iskut Telegraph page on Facebook. There is a Facebook buy and sell in Dease Lake. “Facebook is where everyone gets their information.” For example, Tahltan lists its job postings on Facebook: “That’s where everyone goes to look.”

The assistant band manager said they do not use webinars for training: “Not yet.”

One informant listed online shopping Skype, and various applications such as Google Drive and Dropbox for cloud storage, and Google Hangouts for distance education projects. Online videos and movies are popular for personal use, but data caps can make them expensive.

The tourist lodge listed email, reservations, accessing government information, paying taxes, and banking. (Education and health care applications are discussed below.)

**Most important applications:**

The assistant band manager listed payroll, accounting, reports to TriCorp, and Facebook bingo.

Another informant listed email, conferencing, and sharing documents.

The tourist lodge listed email, banking, reservations, and government information – paying taxes.

**Websites:**

The band has a website, which is used for providing information about the band and community, tourism information, news, and for posting employment opportunities. The assistant band

manager said that she does not know how to update the website (information on the website appears dated; see [www.iskut.org](http://www.iskut.org)).

The Tahltan Central Government also has a website with information about culture, governance, language and employment (see [www.tahltan.org](http://www.tahltan.org)).

The tourist lodge has a website that is used for marketing and reservations.

Facebook is “the main way to engage with band membership” according to one informant. He also stated that Instagram is popular.

#### **Problems with using digital technologies:**

The tourist lodge operator cited cost: “It is still expensive in rural areas.”

One informant said that, although prices may be high, “People would pay for DSL before their phone bill.” However, low income residents can’t afford ADSL. Some go online at other people’s homes.

There is no mobile service: residents use Wi-Fi for tablets and smart phones at band office.

An informant said that ADSL is not as fast as they would like. The band office can’t do Skype or videoconferences. She would like to get fibre.

The First Nations Schools Association of BC (FNSA) supports principals and teachers. Since they are unable to participate via videoconference, the grade 2-3 teacher would have to travel to Terrace and fly to Vancouver. Travel by car and air can take 1 to 2 days each way, so the teacher would miss a week of teaching.

The principal of the school notes: “The quality of our Internet service makes it very difficult to use the internet for educational purposes. It is unpredictable and unreliable – two factors that are a detriment to teacher planning and implementation of programming.”

#### **Public access:**

The band office has a computer for public access, with Wi-Fi and a printer. Residents come to check email, search for jobs, print resumes, etc.

The community hall has Wi-Fi; people can use their smartphones and tablets. People can use smartphones with Wi-Fi.

The school does not provide community access to its facilities (see below).

The tourist lodge operates an Internet café at its store during the tourist season.

The Dease Lake Education Centre operated by Northern Lights College provides computers and Internet access.

### **Education:**

#### **Klappan School in Iskut:**

The school, which includes Kindergarten through Grade 8, has Internet-connected computers for student use. Students are not expected to do assignments or submit materials online.

Students can use the library until 4pm providing that the librarian is available. It is also available to the Head Start staff and the Language Nest staff. The principal stated: "We do not allow access to others in the community as our librarian is part time."

The teachers use the Internet to obtain material for classes. However, the principal stated: "Internet videos etc. are very difficult to show in classes due to the poor Internet connectivity (doesn't download fully, cuts in and out, etc.)"

Teachers may participate in continuing education or other professional activities online. However, the principal states: "I don't think that any do, and I am unsure that the current connectivity service could support this."

#### **High school: Dease Lake School**

Students from Iskut attend high school in the town of Dease Lake, 84 km. from Iskut.

The school has a computer lab with Internet access and laptops with Internet access that students use to complete assignments, complete research, develop projects, Powerpoint presentations, essays and tests. Concerning technology in the classroom, a teacher states: "I do expect the students to save their work on the computers and then to use the computers and a projector to present their Powerpoint presentations or other projects."

Some students are taking courses online. Only students working through online courses are expected to submit assignments online. However some assignments require internet research to be completed. A teacher states: "I would say students are not expected to have high speed internet at home, but it does provide an advantage to them, provided they are using it as required."

Students can use the school's computers or library after hours. A teacher comments: "My students are allowed to use the laptops after school, before school and at lunch if they require." Another teacher notes: "Others in the community may have to sign a usage agreement."

Students can also access facilities in the Iskut band office and Northern Lights College in Dease Lake.

Teachers obtain course materials online, and use the Internet in other ways in their teaching. Teachers participate in continuing education or other professional activities online. A teacher notes: "I am part of a group of teachers taking part in a group mentoring project where we create a virtual learning environment and conduct Skype and Blue Jean meetings to facilitate our professional development."

A high school teacher comments: "I find it is difficult for students to sift through the vast amounts of information available online to extract key points. Also, I find students rely on other people's work (copy/paste/plagiarism) much too often as a 'short cut'."

#### **Adult distance education/online courses:**

The education manager stated that students can get certificates and diplomas online, but it takes a long time studying part time.

Some residents have taken online courses, which are available from institutions including Northwest Community College, Royal Roads University, and Thompson Rivers College.

One resident completed an online diploma in Business Administration. He later was able to complete a BA in Commerce online from Royal Roads University while living in Iskut and using the ADSL connection.

Most study online courses at home. Some who work for the band are allowed to do a couple of hours per day at work.

#### **High school completion and post-secondary training:**

The education manager stated that about half of high school graduates leave for post-secondary education.

Some have only the Evergreen certificate (BC high school completion), and have to do upgrading for further education. They need the BC Dogwood certificate of high school graduation to continue their studies.

There is no funding for short courses. Post-secondary funding is only for long term studies, from TriCorp (The Tribal Resources Investment Corporation).

The Dease Lake Education Centre just offers courses on demand, but no regular training. For training in trades, students have to go to Terrace, Smithers, or Prince George.



**Healthcare:**

The nearest doctor in Dease Lake. The doctor visits Iskut once per week. The nearest hospital is in Terrace (500 km away).

Emergency medical evacuations are done by helicopter from Dease Lake, or charter flights from the airstrip at Dease Lake.

Equipment was installed for telehealth (videoconferencing), and people were trained, but it has not been used. The health director does not know why the equipment has never been used, but thinks the quality of connectivity and speed are too slow for telehealth (videoconferencing).

People generally have to go away to get training in health fields. There is no use of webinars or Skype-type services for training. The health director thinks that one person took an online course through Northwest Community College in Terrace.

**Impact of Internet access:**

The assistant band manager said that the band saved time and money with direct deposits and filing reports online. They are also able to raise money through Facebook bingo.

Another informant said that using the Internet cut down on costs, and allowed sharing information and improving coordination. “Logistics have improved a lot.”

The tourist lodge owner stated that Internet access saves time, but costs a lot.

**Importance of digital technologies for the community:**

People in Iskut generally think that Internet is important. One informant stated: “People are ‘power users’ compared to people in cities. They don’t have local shops – they shop online. Their whole life is online”.

“Technology is a benefit for isolated communities.”

“Technology has taken over everybody’s lives.”

NOTE 1: Overview of FMCC-ISED Project Provided to Iskut Community Facilitators



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### **Key Informant Interviews for Industry Canada-funded Research Project**

The First Mile Connectivity Consortium (FMCC) is working with Denise Williams from the First Nations Technology Council on a research project funded by Industry Canada. The FMCC is a national non-profit association of First Nations telecommunications associations and organizations serving remote and rural communities. For more information, please see: [www.firstmile.ca](http://www.firstmile.ca)

The research focuses on digital technology adoption and use in Northern Indigenous communities in Canada. We are looking for a First Nations community in Northern B.C. to work with on this project. Specifically, we hope to conduct interviews with people living and working in the community about their experience with technologies. This research explores how technologies like broadband networks and social media can meet community needs. We are also learning about the best research methods to study this topic in partnership with involved communities.

During the week of Feb.1-5, 2016, we are hoping to interview people such as:

Local leadership (Chief and/or Councillors); band administrators; public service providers in the community (Education, Health, Lands and Resources, etc.); local businesses; and other community members who have interest and involvement in technology.

During the interview, a trained researcher will ask people to share their knowledge and experience. The interview will take approximately 30 minutes to 1 hour. Interview participants will be provided a small honorarium to support their involvement.

The interview is audio recorded. Written transcripts will be made of the recording and then the original audio recording will be destroyed. The information gathered will be analyzed to provide overall findings and recommendations to Industry Canada regarding digital technology adoption in Northern Indigenous communities. Interview participants are welcome to contact the project manager to request publicly available documents on this study.

For more details and information, please contact project researcher and First Mile Coordinator Dr. Rob McMahan: [rdmcmaho@ualberta.ca](mailto:rdmcmaho@ualberta.ca)

**NOTE 2: Introductory Email about FMCC-ISED Project to Iskut Community Facilitators**

Dear Calvin, Chad and Denise,

This is excellent news! Calvin, thanks so much for getting back to us and participating in the project.

I'm cc-ing here Heather Hudson who is also working with us on this project.

I'll attach here a broad project overview of what we're hoping to work with you on.

We can adjust the dates noted in the document -- we are hoping to conduct the interviews in mid-February.

We are looking to partner with a community to profile for this project. It sounds like Iskut may be a good fit.

This is for a study for the department of Innovation, Science and Economic Development Canada (formerly Industry Canada). We are conducting research on barriers and supports for digital adoption and use in Northern Indigenous communities in Canada. As well, we are exploring some of the methods that research can use to explore these topics with remote/rural/isolated communities.

A major focus of our approach (and our recommendations to ISED) is to ensure that communities are involved in the development of this research. Therefore I'll be sending you questions in advance, and discussing our proposed research method. This is to ensure that it fits your requirements. We hope that this work will support local efforts to use digital technologies to address community and economic development needs.

We have some funds to support for a community coordinator and community interview participants.

Calvin -- how is your availability on Monday (Feb 8)? Can I call you then to discuss our approach and suggested method for this research (key informant interviews)? What is the best number to reach you at?

We are working on questions now and will get you draft questions shortly.

Thank you again, enjoy the weekend,

Rob

NOTE 3: Consent Form for Iskut Key Informant Interviews



First Mile Connectivity Consortium  
PO Box 104  
Fredericton, NB E3B 4Y2  
<http://www.firstmile.ca>  
Phone toll-free: 1-877-737-5638 X 4522

**Project Information and Consent Form – Interviews with Key Informants in Iskut First Nation**

The researcher will review the following information verbally with participants and ask them for oral or written consent. A copy of this information sheet will be emailed or mailed to participants upon request.

**Important Information**

You are being asked to participate in a research project funded by Innovation, Science and Economic Development Canada (ISED). The research focuses on digital technology adoption in Northern Indigenous communities. The information provided below will help you understand exactly what is being asked of you. Please read this form carefully and ask all the questions you want before deciding to participate or not in this research. Please take whatever time you need to reach your decision, and consult with others if you wish. Your participation in this study is completely voluntary.

This research project has been reviewed by the community research coordinator in Iskut First Nation (Calvin Carlick). The project researchers have been trained to conduct research in a way that is respectful of participating communities. If you have any questions or concerns about this research project, please contact the project manager for the research project, Brian Beaton. Contact information is at the bottom of this form.

**Description of the Project**

This research project will investigate how people living in Iskut First Nation are adopting digital technologies such as social media applications and broadband networks. This research is funded by ISED. It will contribute to efforts to improve digital technologies to meet the needs of organizations and people living and working in Northern Indigenous communities. We are also researching what research methods work best for studying this topic. This work will result in a public report submitted to ISED. Project researchers may use some of the data collected in this research for future academic publications but in the event that the information is used in such a way, the involved researcher(s) will apply to their university Research Ethics Board to receive approval.

Two First Nations technology organizations are partners in this research project and have provided feedback and support on research design, methods and questions:

- First Nations Technology Council based in Vancouver, B.C.

- First Nations Education Council based in Wendake, Quebec

### **Procedure**

The interview involves questions about the adoption and effective use of digital technologies in your community. If you agree to participate, a trained researcher will ask you to share your knowledge and experience about these topics in a semi-structured interview. You will be asked to provide your comments and opinions and discuss your experiences about these topics. The interview will take approximately 30 minutes to 1 hour.

The interview is audio recorded; written transcripts will be made of the recording and then the original audio recording will be destroyed. Your name will NOT appear in any reports or articles about the research. The information gathered will be analyzed to provide overall findings and recommendations to Industry Canada regarding digital technology adoption in Northern Indigenous communities. You are welcome to contact the project manager to request publicly available documents on this study.

### **Potential Harms and Benefits**

The researchers are not aware of any risks or discomforts associated with your participation in this research. If potential harms are discovered, you will be informed as soon as possible. Your participation will contribute to our effort in learning about digital technology adoption and First Nation communities, and will be included in a publicly available report to ISED.

### **Privacy and Confidentiality**

Your confidentiality will be respected. Information that discloses your identity will not be released without your consent unless required by law. Only the project researchers will have access to your information. All interview transcripts will be identified through a code that can be linked by the researcher to the interview, and this link will be kept secure and never revealed outside the research team. The original recording of the interview will be destroyed after a written transcript is made.

All data, notes, and transcripts are stored in a locked office and all information gathered from you will be confidential. Such data will be retained for at most 12 months before it is destroyed. Data from the study will be summarized to provide overall findings and recommendations for the research team and your identity will not be revealed in any presentations or publications that result from this research. The project researchers may use the data from this study in future research, but if they do it will have to be approved by a university Research Ethics Board.

### **Compensation**

As compensation for your participation and time, you will be given \$20. You will be mailed this compensation when the interview has been completed (please provide your mailing address either below or orally).

### **Legal Rights**

By accepting this consent form, you are not waiving any of your legal rights.

**Voluntary Participation and Right to Withdraw**

Your participation is completely voluntary and you may end your participation in the interview at any time.

**Contact Information**

For more information about this research project, please contact:

- Project Manager: Brian Beaton, First Mile Connectivity Consortium, Fredericton, NB. Tel: 1-877-737-5638, extension 1522, [brian.beaton@knet.ca](mailto:brian.beaton@knet.ca)

**Signatures**

Participant

I, \_\_\_\_\_, have read and understand the information given in this form and all my questions have been answered to my satisfaction. I have had sufficient time to consider whether or not to participate in the study and consent to participate. I understand that my participation is completely voluntary and that I may withdraw from the study at any time without penalty.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Mailing Address (for compensation):**

\_\_\_\_\_

**Researcher**

To the best of my knowledge, the information on this consent form and the information I have provided in answering any questions fairly represents the research study. I am committed to conducting this study in compliance with all ethical standards that apply to projects that involve human subjects. I will ensure that the participant receives a copy of this consent form if requested.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



**NOTE 4: Project Interview List – Digital Technology Adoption and Use in Iskut First Nation**

Date this list was completed \_\_\_\_\_

Total # of interviews on this list \_\_\_\_\_

#	Interview date	Name (First and Last)	Job title or role in community	Phone	Email	Mailing Address	Gender f/m	Mp3 file name
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

**NOTE 5: Interview Questions for Leaders/Organizations/Businesses in Iskut**

**First, can you tell me a little about your organization (or business):**

What kind of organization do you work for or represent? (e.g. band council, nonprofit, local business, health centre, etc.)

About how many employees are there in the organization?

What is your role in the organization? (e.g. manager, owner, board member, staff, etc.)

**The next set of questions is about digital technologies in your business or organization.**

Does your organization currently use use the Internet or other online services? (IF NOT, ask why not: relevance, cost, equipment, skills, etc. AND GO TO LAST SECTION )

Who provides your online services?

What technology does your organization use to go online? (DSL, satellite, etc.)

Do you and your staff use any of the following technologies at work?

- Desktop computers
- Laptop computers or notebook computers
- Tablets
- Smartphones

Are there any limitations on how employees are allowed to use these technologies at work?

Does your organization provide training for employees on using digital technologies?

Does your organization have its own technical support? (e.g. an IT manager, or employee with advanced technical skills). If not, can you get help in the community with technical problems?

**The next questions are about how your organization uses digital technologies.**

What are the main ways your business or organization uses digital technologies, including the Internet? (email, social media, accessing government information, banking, webinars, etc.)

Which of these would you say are most important for your business or organization? Can you explain why? (Probe for top three uses.)

Does your business or organization have a website?

If yes, how is it used? (For example, information for community, posting jobs, marketing, ecommerce)

Has high speed Internet helped your business do things it couldn't do before? Save time or money? Offer new services or reach more people?

Have you had any problems with using digital technologies including high speed Internet in your organization? (e.g. price, quality of service, equipment, software, viruses, etc.)

**The last questions are about digital technologies in your community.**

Are there public access locations in the community where people can go online? If yes, what locations (school, library, band office, Internet café, etc.)

Are there places in the community where people can get training or help in using digital technologies?

Are there people in the community taking online courses? (high school, college, training, etc.)

Are there any problems or barriers that might keep some community members from using digital technologies or going online?

If yes, are there any changes you would suggest to address these problems?

Overall, how important do you think digital technologies such as computers, smartphones and the Internet are for your community?

Do you think they will be more important in the future?

Can you tell me anything about technology use by emergency management services (experience and/or supports and barriers/challenges)?

**Thanks for your time and contributions to our study.**