Indigenous Peoples in North America are pursuing innovative and independent ways to connect to the Internet. They face unique challenges to connectivity and, when it comes to policymaking, they are often left out of both national markets and the policymaking processes that supports it.

The COVID-19 pandemic has brought to light the importance of broadband, especially in rural, remote, and Indigenous communities. Leaders in both Canada and the US have expressed their commitment to ending the connectivity gap, providing new opportunities to advocate for Indigenous connectivity and policies. This is a unique window of opportunity to enact policies that truly benefit Indigenous communities rather than disenfranchise them further. Politicians must take bold and rapid action to reach digital equity, in coordination, with the Indigenous communities who lack affordable access.

Indigenous voices are critical to conversations about connectivity, especially when the policy outcomes of those conversations will affect Indigenous communities. That is why the Internet Society held its third Policy and Advocacy Training in the lead up to the 2021 Indigenous Connectivity Summit (ICS).

Over the course of six weeks, over 80 individuals from across the US and Canada — most of whom are members of Indigenous communities — met for the training. The participants discussed the role of policy and advocacy, the outcomes of the current connectivity environment due to the current political state of play, and how they can positively impact new policies or rules to support equity and inclusion.

This group brainstormed and developed this list of recommendations that, if adopted, could create an environment that enables Indigenous communities to drive their own connectivity solutions. During the 2021 ICS Summit, all participants to the event were able to review this document and added their input. The creation of this document parallels how ICS participants would like to see connectivity happen — by the community and for the community.

While previous years’ policy recommendations served as stand-alone documents, this year’s participants emphasized that the documents should be read together in tandem. Policymakers must look at this multi-year historical record from the ICS community, as they move forward with new policies to address connectivity. Please read the 2019 and 2020 ICS Policy Recommendations for this historical record.

Please help make your local policymakers aware of these recommendations; share them on social media, raise them in meetings, include them in reports, and more.

Now, more than ever, connectivity and community are key.

The following were adopted as the 2021 ICS Policy Recommendations. They are presented in no particular order of importance; all are considered of equal priority. The recommendations fall into six critical areas: inclusivity, community consultation, engagement; spectrum rights and sovereignty; engaging local capacity in Indigenous communities; infrastructure and ownership; beyond infrastructure: digital literacy, data sovereignty, and sustainability; affordability; and effective and accurate mapping.
Specific policies and recommendations within each of those categories can be found below:

**Inclusivity, Community Consultation, and Engagement**

There must be better accountability and increased efforts both from governments and non-Indigenous entities to engage and consult with Indigenous communities in meaningful ways. The Government of Canada has an express duty to consult with Indigenous communities, and it has the power to require meaningful engagement and consultation from entities working with Indigenous communities.\(^2\) This can be improved through the following policies:

- Consultation between government and Indigenous and non-Indigenous entities should be based upon best-practice Key Performance Indicators (KPIs) to determine if the engagement is meaningful. These specific KPIs should be based on community needs, clear project timelines, and mutually understood goals and definitions. The Indigenous communities must also approve of designs and plans prior to deployment.

- Indigenous (Tribal, Native Hawaiian, First Nations, Alaska Native, Metis, and Inuit) governments and/or representative organizations must be engaged during the early planning stages of any project or policy that may affect their communities or land. By working with Indigenous communities early on, non-Indigenous entities may be able to form mutually beneficial and lasting relationships. Furthermore, Indigenous governments will be empowered to play an active role in the projects and policies that impact their communities.

- Non-Indigenous Internet Service Providers should receive training, cultural education information, and other community-critical information from the community regarding sacred sites, norms, etc. prior to deploying service.

- Partnerships should be encouraged both between Indigenous and non-Indigenous entities as well as between Indigenous communities.

- Indigenous peoples should be commissioned to provide guidance to government agencies, committees, and representative bodies should increase the number of salaried Indigenous staff to provide guidance and insight into all policy processes impacting Indigenous areas.\(^1\)

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1. Additional examples of best practices for community consultation and engagement can be found in this resource from the First Mile Connectivity Consortium: [http://firstmile.ca/resources-for-community-engagement/](http://firstmile.ca/resources-for-community-engagement/)

2. [https://www.tc cac-cimac.gc.ca/eng/1331832509888/1609421255810](https://www.tc cac-cimac.gc.ca/eng/1331832509888/1609421255810)

3. This is particularly important given the growing pressure on Indigenous representatives to continually share their story, which can result in knowledge fatigue. In the words of Twyla Baker, “The idea that Indigenous people (or any marginalized person/group) engaging with the larger population on a given subject or topic related to bias, must first set the stage in terms of historical context all the way to current day state of affairs, before even addressing said topic of bias - over and over again - due to the lack of education/background the listener has. A Direct impact of erasure of true Indigenous history beyond the cursory mention in our school systems.”
- An Indigenous Broadband Fund and centralized data base that captures funding opportunities, eligibility, and information on how to apply should be created.

- Indigenous representatives should be hired on a salaried basis to serve as liaisons to assist communities with their applications for funding and participation in policy processes. These representatives should also serve as a resource for Indigenous communities looking for vendors and potential partners.

- All federal funding for broadband networks — absent a parallel program designated specifically for Indigenous communities — should include a five percent set-aside meant only for Indigenous communities or Indigenous-designated entities.

Spectrum Rights and Sovereignty

Spectrum, like water, is a critical natural resource for Indigenous communities. Federal regulators must therefore ensure that Indigenous governments, Indigenous-owned entities, and communities have first rights to the spectrum over their lands. There is already precedent for spectrum sovereignty in New Zealand, where the Māori people were able to secure radio spectrum over their lands under the terms of an 1840 treaty with European colonizers.4

- Federal regulators should include an Indigenous Priority Window, similar to the one held for Educational Broadband Service spectrum in the United States, for every spectrum auction. This model should also require spectrum allocators and regulators to provide more robust educational opportunities about the Indigenous Priority Windows.

- Indigenous communities should have first access to spectrum over their land during spectrum auctions and if spectrum licenses are transferred, the community should have first right of refusal. Indigenous communities should also be able to financially benefit from their spectrum by being able to lease it to providers.

- Unused spectrum over Indigenous lands should be reallocated for Indigenous use.

- Internet service providers who acquire spectrum over an Indigenous community, but do not use it within a reasonable number of years (e.g. three years), should be required to give the spectrum license to the community it covers.

- As outlined in the United States Government Accountability Office’s 2018 report on tribal broadband5, to be eligible for Universal Service Fund support in the United States, a provider must be an “eligible telecommunications carrier” (ETC). However, this eligibility is overly cumbersome for Indigenous communities and can prove to be a significant hurdle in the spectrum ownership

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5 https://www.gao.gov/assets/700/694810.pdf
process. The ETC eligibility should be reconsidered and specific metrics should be set for Indigenous communities.

Engaging Local Capacity in Indigenous Communities

A major goal of connectivity is capacity building in Indigenous communities. Funding for infrastructure, operations and maintenance, and training (technical and digital literacy) are equally important to fundamentally achieve digital equity. In the Truth and Reconciliation Commission’s Calls to Actions, the Government of Canada named the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP) as a framework that corporations should follow.\(^6\) This framework calls for meaningful engagement, education on Indigenous history and culture for management and staff, and “equitable access to jobs, training, and education opportunities in the corporate sector.” All entities looking to work with Indigenous communities should adhere to UNDRIP’s framework.

- Federal grants should be created and tailored to Indigenous communities for basic planning, digital inclusion, and network operation and maintenance.
- Project managers for networks with government funds should be required to complete a comprehensive assessment of local assets on the ground in terms of equipment and expertise.
- If government funds are allocated to private, non-Indigenous entities operating on Indigenous lands, those entities should be required to train and hire community members to install and maintain the network on their own land. There should also be a first right-of-refusal for Indigenous contractors.
- In accordance with the Navajo Preference in Employment Act, preference for contractors must be local Indigenous first, Indigenous second, and external non-Indigenous last.\(^7\)
- Any local efforts to train community members must be long-term and sustainable to ensure the longevity and success of the network with full inclusion of community members.
- Private, non-Indigenous entities should also be required to service a higher penetration rate to ensure homes are serviced as well as businesses.

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6 The Truth and Reconciliation Commission (TRC) was established in Canada in 2008 to address the effects of the Indian Residential Schools system. The TRC published a multi-volume final report in 2015, which included 94 “calls to action.” Please find the calls to action document here: [https://www.irss.ca/downloads/trc-calls-to-action.pdf](https://www.irss.ca/downloads/trc-calls-to-action.pdf)

Infrastructure and Ownership

To bring essential connectivity to these under-served communities, flexible and creative approaches to technology and funding models are needed, including empowering Indigenous communities to own and maintain their own infrastructure (as the service provider or otherwise).

- Policymakers should ensure that when new federal development funds for broadband are created, the criteria for applicants must be inclusive and not preclude Indigenous government or community member participation. They should also open funding to all kinds of providers, including small or community-run networks.

- Federal funding opportunities, including development funds, should prioritize community choice, including through community networks, public-private partnerships, mesh networks, and access to Low Earth Orbit satellites where available. These opportunities should also start at the “First Mile” in unconnected communities and ensure sustainability by including support for operational expenses.

- Separate models should be considered for un/under-connected areas as well as urban, connected ones to support equity.

- Grants for funding for networks should be straightforward, easily accessible, and without overly burdensome reporting requirements to encourage Indigenous, rural, and remote applications. Federal grants should prioritize comparative applications instead of reverse auctions.

- Government funding for networks in Indigenous communities should have greater flexibility for speed requirements as it relates to affordability and backhaul capacity. Governments should also allow for Indigenous networks to scale their speeds up as they are able to afford higher speeds.

- External, non-Indigenous entities that build on Indigenous lands should be required to adhere to the speed standards set by governments.

- Policymakers and service providers should prioritize symmetrical bandwidth offerings and validate that providers are achieving the promised speeds in the contract through regular performance testing.

- Dig-once and other policies should be implemented to increase the availability of dark fiber.
Beyond Infrastructure: Digital Literacy, Data Sovereignty, and Sustainability

Broadband networks are only as good as the folks who use them and the programs that run on them. Infrastructure is the first tool in achieving true connectivity and digital equity. It is imperative that governments support the initiatives that follow deployment to ensure that communities can use their connection to its fullest potential and for as long as possible.

- Recipients of government funding for connectivity should be able to use their allocated funds towards digital literacy initiatives for all community members with community leadership buy-in. Governments should provide ongoing support for digital literacy initiatives to keep education sustainable.

- Indigenous communities should be the owners and stewards of their own data. Indigenous-owned and -operated community networks can facilitate the digital preservation of language and culture, and some of this material is highly sensitive. It is essential to protect and respect elders’ knowledge. As the Native Nations Institute on Data writes, “Indigenous data sovereignty is the right of a nation to govern the collection, ownership, and application of its own data. It derives from [Indigenous communities’] inherent right to govern their peoples, lands, and resources.”

- Federal funding and spectrum allocations should extend timelines for deployment or completion of projects to provide Indigenous communities enough time to build a strong foundation in managing and sustaining a network long-term. These extended timelines should include funding eligible for ongoing support for networks.

- Federal funding should allow for unique financial models that may better fit the communities that networks serve. Models like mutual aid and different types of partnerships should be permitted.

Affordability

It is not enough for Indigenous communities to merely get access to service. To achieve digital equity, service must be both accessible and affordable.

- Metrics must be created to measure, inform, and monitor affordability. Service should then be routinely evaluated and publicly reported on to ensure they continue to be affordable to communities.

- Standard-use pricing models should be maintained that link price to the actual cost of bandwidth.

8 http://nni.arizona.edu/application/files/1715/1579/8037/Policy_Brief_Indigenous_Data_Sovereignty_in_the_United_States.pdf
- Research should be carried out to determine equitable pricing for bandwidth. This research will provide evidence to support price discrepancies between urban and rural communities, who desperately need, and deserve, equitable access.

- Indigenous communities should have greater control over their data-gathering mechanisms regarding bandwidth services.

Effective and Accurate Mapping

It is known that broadband mapping data collection in both the United States and Canada requires significant improvement to support research and equity. The appropriate agencies should prioritize changes to the way data is collected and who is excluded from federal programs based on mapping challenges immediately.

- Funding programs frequently exclude communities where data shows that a single home meets minimum service standards within their hexagon or census block of mapped space. New limits should be set so if a majority of the population is not served, the community will be eligible to apply for funding for connectivity projects.

- If an entity receives federal funding for builds on Indigenous lands, they should have a new funding structure that identifies what provisions and subscription rates are needed for that specific community (e.g. broadband speeds or otherwise depending on what backhaul is available to the community).

- Both dark and lit fiber should be mapped, and made publicly available, as well as the number of homes and businesses connected to them.

- Incumbent Internet service providers must be accountable, through reporting, to ensure community members are actually getting access to the reported bandwidth.