Telecommunities Canada Annual General Meeting -- 2023-2024

Appendix to Meeting Minutes

Agenda item 6. Member reports -- full version

Garth Graham reports on the difficulties with the listserv, explaining the technical issues and the efforts to resolve them.

Our main listserv has been hung up now for months, and I'm going to give you some background on that. Our lists,website and domain names were originally set up in Victoria Freenet by Gareth Shearman. When the Victoria FreeNet went out of business in approx. 2016, one of our members and our head techie, Kevin Battersby, kept parts of Victoria Freenet functioning. He and I transferred the old servers to him, and he plugged them into his own systems. He was an ISP for the Ragged Edge Network in the northern end of Vancouver Island. So he took possession of the servers and parts of what was on them. They still actually function, but they're now very old. In keeping with the nature of community networks, the code that's embedded in them is sort of encrusted like a coral reef across 1000s of miles of code, and Kevin has been maintaining the domain names himself. Anyway, the basic list difficulties, as far as we're able to determine, occurred when Gmail, under Google, became concerned about certificates for security on various forms of listserves, and the lists that we were maintaining were no longer compatible.

Kevin then moved from Victoria to the Avalon Peninsula in Newfoundland, and he had to reconfigure his own stuff to continue. He's still providing ISP services to the Ragged Edge in the northern part of Vancouver Island, and he has other clients. As of yesterday, he had a new server up, and the TC lists and the TC website are on that server. The old one is still in operation, and he and I ran a couple of tests overnight which indicate that we're not yet ready for prime time. There's a couple more glitches, but I believe that we are one or two days away from being back in business with the TC site on a new virtual network, on a new server. We are hoping that the TC lists, of which there are actually three, the advisors list, the directors list (which we have not been using recently), and info@tc.ca which is embedded in the website. I'm the administrator for the first two, and the info@tc.ca points to Marita. Until we are all fixed though, Marita is using a new list on NCF for the TC member addresses that are being rejected through the old list. Kevin has been working away diligently to get things fully operational. He's been a member of of TC from the beginning, and was a power behind keeping a

Victoria Freenet in place all throughout its history. He doesn't sing his praises much but he is one of those quiet heroes of Canadian networking.

Tracey Axelsson updates on the Vancouver Community Network, mentioning projects like the Digital Skills for Seniors and the assistance provided to Seattle Free Net.

We are fostering the digital skills for seniors project. We work with a couple of organizations here in Vancouver to bolster support and get devices to seniors. But honestly, it's been treading water this year to get projects, to get grants, get anything. It's been near impossible. VCN is still alive. We're still happy to do what we do. Because of our work with the digital skills for youth program and other projects that we ran, we still have a very healthy bank account, so we don't see anything changing for a couple of years. We did help the Seattle Freenet, which still exists. We helped them with their servers and other maintenance. It was actually a multiyear project to get all the stuff working correctly. They paid us to do it, so that's nice. It is interesting that we still have a freenet in the USA.

Marita notes that there is an ICANN public meeting coming up in Seattle. She will consider proposing a session about freenets highlighting the work of VCN, NCF, and Seattle. Is getting people access to the internet as important today as it was 30 years ago? It could be a really interesting session as ICANN public meetings rarely talk about Freenets.

Chris Cope (update read by Marita Moll) provides an update on NCF's Community Wi-Fi project, aiming to bridge the digital divide in urban low-income areas.

Chris reports on NCF's recently launched community WiFi project. Those living on low incomes in urban Ottawa are more likely to struggle with the high costs of home internet and cell phone data plans and less likely to receive digital skills that they need. With the tremendous assistance from partners, Canadian Internet Registration Authority (CIRA) and Hiboo Networks, which is owned by Ottawa hydro, NCF is piloting a community WiFi network to help bridge this gap by delivering free, secure, fast and high quality WiFi in indoor and outdoor community spaces across the areas in Ottawa where there is social housing. NCF us getting some good press on this particular project. It's been quite an undertaking. See presentation below for current status of this project:

Grassroots to rooftops: Building a free community wifi network across Ottawa. Dec. 8, 2025. https://www.ncf.ca/en/documents/148/CommuniFi_by_NCF_-_Dec_2025_Presentation_-_FINAL.pdf

NCF is suffering from reduced membership. You can't offer fast, good and a free. And people want faster internet. NCF is pivoted to this particular area and it is getting them a lot of good press.

Fred Campbell discusses his ongoing trans-disciplinary PhD focused on rural community survival and the importance of face-to-face communication.

I'm still continuing with the trans-disciplinary PhD, which is based on survival of rural communities. A lot of people, where I work in Newfoundland, have seen me doing special events with community television and community radio for years, arriving with a van full of equipment and stuff like that. Now, when I arrive at a place where they don't know me as well as they used to when I went to places every few weeks, people focus on the technical and that basically means the internet, rather than community building locally. But I have to keep going back. I really feel that a TC fundamental principle is that community is the most important. And so that's what I'm trying to do.

In rural Newfoundland with internet, there are so many empty spaces out there, even with all the money they've given Bell. People in some parts of the province have protested saying that if you're going to close hospitals, then you have got to be providing at least cell phone service. Well, they don't have cell phone service.

I remember when, during the CAP (Community Access Program) period (1994-2012), we had a number of people online talking about the need for CAP. I can remember one person who was special advisor in Nova Scotia to the premier who said "Man, we don't need CAP sites anymore. I mean, every kid has his computer in his bedroom". Well, what I found at the beginning of going back to communities on this PhD is that there are so many older people, and people not even that old, who don't have computers and don't know how to use computers. The internet is important, obviously, but just to depend on the internet is kind of questionable in some areas. In this trans-disciplinary PhD, I originally intended to get back to work in communities. In the past, I've worked in more than 64 rural communities on communication projects. But then along came COVID and communities were actually putting boards across their communities, blocking entry. So my whole concept of being able to revive these community forums all across western Newfoundland where I had worked was gone. And there's no money anymore.

One of the supervisors I'm working with is a indigenous leader. He's in his mid 80s, and he's been

working on organization of the Mi'kmaq qroups since the 70s. Everything to him is oral. I went to a recent indigenous event and the people all start out by telling stories. It's a story telling culture, which is what community communications is anyway. I'm now caught between the whole concept of how do you promote the internet, given technical problems we have, given the lack of training, I think that we need to have more face to face events. We need people talking to each other .

Kathryn Carruthers shares her work with Senior Women Living Together, emphasizing the need for digital skills training and community building.

I've been engaged in community building with a group called Senior Women Living Together (https://swlt.ca/). I joined to help out with their website, and I've ended up spending a lot of time in the last year helping them expand their programs. Because it's senior women and it's an online resource, once we got all the website stuff sorted out, we started training older women. Everybody's trying to figure out how to do everything online, so I'm spending a lot of my time at the public library here because the staff there have done a great job of using a library to build community instead of just handing out books. I'm doing a couple of evenings a month. Because we had to make the library more relevant, we have to have a certain number of events per month and a certain number of people coming in. I've been teaching people how to pick a computer, and the next one in January is how to travel with your phone, like turning on roaming and getting all your maps and that kind of stuff. So pretty basic computer stuff, but also community building, Personally I'm pretty introverted. I'd be fine just staying in my room and and emailing people, but this is forcing me to build my own community.

We do have high speed internet now in town. A couple of local companies got some government money to get high speed to rural areas, so a lot of the farms have been hooked up. They had an event a couple of weeks ago with local small business people. There was a panel of an auto repair shop and a farmer with a big dairy herd and a company that grows turf talking about how they've used technology and this new high speed internet to upgrade their businesses.

Adrian Schmidt and Mildred Weiss provide updates on their involvement in various projects, including volunteering and supporting digital needs in remote areas.

Adrian: I'm still a secretary of NARALO (ICANN's North American Region At Large Organization). Very heavily involved, too many meetings, more than what my actual day job, the one that actually pays the bills. I'm the IT director for the headquarters of the General Conference of the Seventh Day Adventist Church. I'm supervising more than 20 people, so I have a lot of meetings, a lot of things to be

worried about during the day job. At ICANN, I've been participating in preparation for ICANN 80, 81 and 82. ICANN82 is coming to Seattle. So if you're near the area, please come and join us.

Some of our volunteer work involves travel. There's a lot of need for a more structural approach to how technology is implemented. Probably Ian understands what I'm talking about. A lot of people try to do their best, but without any planning, and infrastructure suffers. And when infrastructure is not proper, it's like having a house without a proper foundation. It all starts to crack, and you can patch as much as you want, but the cracks will show again. I had an one visit to Rwanda, another one to Ivory Coast, and another one to to the Philippines, where we produced some reports on how they can improve. I liked that job. We also did a mission trip to St Croix, Virgin Islands. You may think this is part of the U.S., so they should be okay with technology and all that. That's not the case at all. We were at a small school that doesn't have a lot of funding. We help them all that we can. Some things that are very basic, for example, filtering for the kids, because the kids can get around anything,

We're living in LA right now, and will soon be moved to Maryland. But we still have our home there in Alberta and we are still volunteering to help the church with all their digital needs, infrastructure, training for the Secretary and elders, how to use all Google Docs, the ecosystem, list sites, all the digital tools, and we are still maintaining what they are running there.

Ian Allen, the webmaster, shares his role in maintaining the Telecommunities Canada website and addressing technical issues.
I'm just a tech guy. I just keep the wheels on.

Marita notes that Ian has been our trusted web master since the beginning, and is always ready to post items on our website when we have something to share.

Garth notes that in the early days of National Capital Freenet, he worked with Ian to put on the very first board election of NCF, which was probably the first online election of any organization in Canada. There was to be a secret ballot, which meant that the voting machine data had to be transferred off one system onto another system to be counted. Garth was the returning officer. There was a point at which Ian could take advantage of access to the data, and Garth was to sit there to make sure that he didn't do that. We were sitting in the NCF office, and, as he did the transfer, someone tried to hack it, and Ian shut down the system. Then we went over to the university computer center and dealt with with the

database directly in order to ensure that the very first digital election in Canada was actually a secret ballot. That's crazy. Okay, that's, 1993

James Van Leeuwen discusses his focus on leveraging the interest of hyperscalers in building data centers in Western Canada. He highlights the potential for open access dark fiber networks to disrupt the telecom industry and improve connectivity. The discussion touches on the challenges of network infrastructure and the potential for renewable energy sources to support data centers. James emphasizes the need for a coordinated effort to attract and support the development of new industries and connectivity solutions.

I 'm still very directly focused on the challenge with networks in rural Canada, but working now to leverage the interest of the hyperscalers in building data centers here in Western Canada. And maybe you saw an announcement in the news recently about a proposed $70 billion project in northern Alberta. Kevin O'Leary of Dragons Den fame, or should I say, infamy, is one of the key persons behind it. This is a massive project, the biggest infrastructure project ever proposed in Alberta, bigger than anything in the oil sands, from a single project point of view. Those of us who understand the infrastructure in the province are kind of scratching our heads wondering what are they going to use for networking. Especially if they're that far north, how do they serve the markets that are going to be the strongest markets for artificial intelligence. It's an AI data center that they want to build. They're not the only ones active in the province. In fact, there's a more credible initiative underway, which would involve building perhaps as many as half a dozen campuses, perhaps even more, smaller than the 70 billion project, but still in the billions of dollars. This one would be in proximity to Calgary and Edmonton.

Along with this new industry, would come demand for connectivity that doesn't exist yet in the province, namely dark fiber. These hyperscalers don't want anybody delivering lit solutions for these data center facilities. They want to be able to light up the fiber themselves. Dark fiber is a really, really hard thing to come by in Western Canada, and there are several of us as a group now exploring this need and this opportunity and how we would work with the hyperscalers to bring this new connectivity solution to Western Canada at scale.

Dark fiber networks are open access networks. Anybody can buy fiber, and they can light it up themselves and use it for whatever purpose they want. Right now, the only fiber that's available is from

the incumbent network operators, and they don't sell dark fiber. They sell lit solutions because it's more lucrative. Now there are developers who build data centers on spec for hyperscalers, and their game is to race out and find the really good prospects before the hyperscalers find them themselves. And then they develop the project and they sell it to a hyperscaler. These developers are the most active right now, at least here in Western Canada, and they're already running into this limitation. I'm connected with some of the people who are consulting on at least one of these projects, and they're realizing this is a bit of a wasteland here,. If the development of a new industry in Western Canada can be leveraged to drive a new generation of connectivity solutions built around dark fiber, it would be a game changer that disrupts the telecom industry right across Western Canada. And I have an appetite for disruption big time.

So I'm pulling together people who would have technical chops and leadership chops and the project management chops to take on a project at scale that would meet the needs of these very, very large companies, the biggest companies in the world right now, from market capitalization standpoint. They have huge cash reserves, huge access to capital. If they wanted to debt finance, they could get really good terms for it. So, just something to keep on the radar screen is that there is a new industry potentially unfolding, at least in Western Canada.

The data center industry in eastern Canada is already better established. They've actually run out of capacity. In the Ottawa region, there's a lot of hydro capacity up the Gatineau River. All of the excess capacity that's available has now been hooked up by data centers. Ireland has been ground zero for quite some time now globally for data center development, and the Irish government set itself up that way, but they've run out of capacity on their grid. So the data center developers, whether it's the hyperscalers or these independents, are now looking further afield, and their number one limitation is not actually the networks. It's access to sufficient power for these facilities. That's going to be the really interesting challenge. The Government of Alberta is pitching natural gas as the solution for meeting their power needs. They're already a bit leery about that. They understand what the implications are of thermal generation with fossil fuels. They take the climate threat seriously. So, if not fossil fuels, natural gas in particular, then what? If we could integrate the intermittent renewable energy resources that we have here in Western Canada in abundance, and that's the solar and wind with the hydro capacity, that can firm up the intermittent capacity that provides a very attractive environment for the data center developers, assuming that we can get the connectivity solutions in place as well. The implications for community broadband are indirect at this point. However, it is the disruption of the

telecom paradigm, where you're now driving out the closed access networks, the facilities based competition and replacing that with open access competition on open access optical fiber, shared fiber. Basically the economics of that are just way better, and that's the bar that's already been set elsewhere in the world. If we cannot provide that, we're not competitive in telecom open access fiber connectivity. So we got a lot of catching up to do, and the potential to attract this industry here at scale, hopefully becomes a catalyst that we need to finally disrupt the telecom industry in a way that serves everybody, except for the incumbents themselves. And nobody really cares about the incumbents, whether they do well or not. They're standing in the way of an awful lot of really good value creation, wealth creation happening. So hopefully we can do something about that. That's what my world revolves around for now,

Just to follow on, it's the emergence of AI that has exploded demand for compute capacity in the world. So the data centers are hosting not just data itself, but of course, the computing capacity for AI. And they're actually running into a limitation now, on the data side of things. They need more data than is accessible or that even exists at this point to train up these models. So there's all kinds of fascinating challenges. We're in uncharted territory here. We never had artificial intelligence in the world before, and there's a lot of concern around the impact that this is going to have. But on the infrastructure side, the current computing paradigm involves maintaining chips at a very high voltage to maintain the integrity of the bits. It consumes a great deal of electrical power. Quantum computing is one of the frontiers that could make a dent there. It's far more energy efficient. It's just hasn't proven to be very scalable up until this point. And the other one that I'm advocating for is much more distributed architecture. Instead of building these massive, centralized facilities, develop a distributed architecture. There's all kinds of good reasons to do this, but it comes back to the networking solutions.

Google Wonder Valley is the $70 billion project mentioned before that's been proposed for Northwest Alberta, very close to the city of Grand Prairie, just to the south. Again, those of us who are paying attention to this stuff here in Alberta are scratching our heads about the network infrastructure challenge. But also, have you ever been to Grand Prairie? They're going to have to pay people to go. And the idea that there's going to be talent streaming in from all over the place to go work on this campus. It's not going to happen. So they are going to have a difficult time finding the talent they need to actually operate a campus at that scale, in that location. But why that location in the first place, given the limitations I just talked about? Because it would be cooler there? Cooling definitely has an advantage. The further north you get, the lower your cooling costs are for the facility. And a sizable

chunk of the energy budget for any data center, is the cooling costs. Northern climates actually quite attractive for data center operations . But Grande Prairie is actually sitting on a geothermal hot spot here in Alberta. So it is the geothermal energy potential of this location, close to Grand Prairie, that I think is the principal motivation for locating it there. And the advantage to renewable power, or power generated from wind, solar, water, hydro or geothermal, is at a zero marginal cost. You're not paying for the input energy like you are with fossil fuels. The renewables are a game changer, because it shifted away from being a commodity based solution to being just a technology based solution. China has recognized this, and they're just eating everybody's lunch, selling wind turbines and solar panels and electric vehicles and batteries. They're leading the world in this stuff, massive scale of production.

Garth has a question about telecoms. Who cares about the telecoms? Well, the Government of Canada cares about the telecoms. Are you seeing any sign anywhere that anybody is figuring out the degree to which our regulatory system is a disaster?

James responds. So the CRTC issued a ruling about incumbent fiber owner operators and push back from Bell and Rogers has been huge. They're influencing the cabinet. And it's working, I'm sad to say.. So are there people in the bureaucracy and elected officials who understand it? No. Maybe there might be a couple out there. And I'm talking to the provincial level now, our innovation ministry here in Alberta. I think he gets it. But I also think he has the appetite for this fight, because it's a fight you're talking about, going to war against the telecom industry. It is disruption. But that's the only way forward for Canada, the only way we catch up with the rest of the world that's already going in this direction with the Open Access. Nobody has the stomach for that political fight, and frankly, we, the Canadian people, aren't giving them the political capital that they need to take on that fight, we just continue to pay our bills for the highest telecommunication costs in the world. And you know, that's really where the whole problem is rooted Garth. It's with the consumers.

7. Any other business -- expanded text

Call for Focus Groups and Final Remarks

- Marita Moll calls for suggestions on small groups that could participate in focus groups to discuss internet governance and digital equity.
- Garth and James offer to provide lists of organizations that could be involved in these

discussions.

With government consultations on internet governance coming up next year, Marita wonders if we can use our networks to put together focus groups , small groups of people who might put together, might be able to talk about this kind of stuff. It could be consumer groups, for example.

Garth notes that, from a community networking point of view, the reality of access is really a question of all these skills and training that we've been talking about. It is a question of digital equity. Can you accept that the opportunity of a horizontal discussion of a Canadian role in WSIS+ 20 is an opportunity for Telecommunities Canada to make the point to the Government of Canada that there's a missing social element in their policy development. Their policy development in relation to the internet, is simply market based. In other words, it's economic, it's not socio economic. And if you can accept that, then in my recent 55 page document, there's a whole page of organizations in Canada that are not coordinated in any way, that are focusing on digital equity, not the least of which is the Association of mayors and municipalities. My conclusion in that was, there was a really good question, and there was absolutely no focal point remaining in the Federal Government of Canada to ask that question.

James responds: What brings it to mind, I should first say, is this idea of reaching out to all these different groups, you know, or engaging them for common purpose, ultimately. This isn't the first tech technological innovation rodeo that the world has lived through. In fact, there have been at least four previously, starting with the Industrial Revolution, and the last one revolved very much around transportation. So we're in the digital revolution now. It's the emergence of integrated circuitry at massive scale, you know, cheap chips, basically. And that started in 1971, so we're over half century into it. The last one was the arrival of an automobile, and there's a form of organization that emerged along with the automobile that served the interests of the automobile user, not manufacturers. In fact, very often, it was lobbying against the interests of auto manufacturers. These are motor associations. So how many people on the call are a member of a motor Association?

So I'm what I'm just going to propose is that the motor associations are already out there. They have millions of members. In fact, I think in Canada, there are as many as 10 million members of the Automobile Association. That's all the member organizations provincially based, typically, but they're all under the umbrella of the Canadian Automobile Association. And in the States, of course, you have

AAA. These are enormous organizations with enormous lobbying power, and if they could be recruited to help advance a consumer based or an end user based advocacy then that could really mobilize things very quickly, because you've already got this base of millions of people who saying "Oh, I've got a car and I've got a phone." And the fascinating thing is that the they are increasingly connected. Cars are now evolving to become appliances, digital appliances, So, can we leverage this legacy organizational capacity that has emerged around automobiles for the purpose of driving advocacy for the benefit of ICT end users?.

Marita responds: Glad you brought this up , James. It is a powerful idea. I urge everyone to take a look at the minutes of last year's meeting, because we had a quite a thorough discussion about that as well.

Ian responds: I just want to add that I go to the Earth Dance retreat center in Western Massachusetts. They're miles down a dirt road from a little farm town called Plainfield mass. The town put in fiber. So this place in the middle of nowhere has fiber right up to the house. I am here in downtown Ottawa, urban, and I can't get fiber to my home like that.

James responds: This movement is strong in the United States now, and the best way to track it is through the Institute for Local Self Reliance. On their website (ilsr.org) you will see the maps. They've actually been mapping all of the community broadband projects across the US. And it's a shocker. They're way the hell ahead of us. And it's because all those communities, including the one you mentioned, have realized that the cavalry is not coming, That the industry is not incentivized to come and actually solve this problem, and the government is not incentivized to come and solve it either, because there's not enough votes left in rural. So anyways, it's happening. It's just not happening here in Canada, at least not at anywhere near the scale that is happening in the US. And so how do we get this? How do we get this going? This is actually now almost existential for rural.