BARRIERS TO BROADBAND DEPLOYMENT IN RURAL CANADA

BARRIERS TO BROADBAND DEPLOYMENT IN RURAL CANADA

COMMENTS

Re: Telecom Notice of Consultation CRTC 2019-406, Call for comments regarding potential barriers to the deployment of broadband capable networks in underserved areas in Canada

SUBMISSION BY

THE CANADIAN RURAL REVITALIZATION FOUNDATION
www.crrf.ca

THE RURAL POLICY LEARNING COMMONS
www.rplc-capr.ca

About the contributing organizations:

THE CANADIAN RURAL REVITALIZATION FOUNDATION

The Canadian Rural Revitalization Foundation (www.crrf.ca) is a national charity that contributes to the revitalization and sustainability of rural Canada through collaborative research for rural leaders in the community, private sector, and in all levels of government. CRRF works to create credible insights and to improve our understanding of issues and opportunities that are of common interest to rural residents across Canada. Knowledge and better understanding are the fundamental pillars for the welfare of rural communities and environments.

THE RURAL POLICY LEARNING COMMONS

The Rural Policy Learning Commons (www.rplc-capr.ca) is a $2.5M partnership grant funded by the Social Sciences and Humanities Research Council of Canada (SSHRCC), based at the Rural Development Institute, Brandon University. The partnership currently involves 30 academic, policy, and practitioner partners across 7 OECD countries in North America and Europe. Major objectives of the RPLC are to build rural capacity and strengthen relationships to inform rural research and policy.

Prepared by:

S. Ashleigh Weeden (weedens@uoguelph.ca)
 PhD Candidate
 School of Rural Development & Environmental Design
 Ontario Agricultural College
 University of Guelph

Wayne Kelly (kellyw@brandonu.ca)
 Project Coordinator   PhD Candidate
 Rural Policy Learning Commons   School of Political Science & Sociology
 Brandon University   National University of Ireland

May 6, 2020

Mr. Claude Doucet
Secretary General
Canadian Radio-television and Telecommunications Commission
Ottawa, Ontario
Canada   K1A 0N2

Re: Telecom Notice of Consultation CRTC 2019-406, Call for comments regarding potential barriers to the deployment of broadband capable networks in underserved areas in Canada

Dear Secretary Doucet,

The Canadian Rural Revitalization Foundation (CRRF) welcomes the opportunity to provide the following comments to the Canadian Radio-television and Telecommunications Commission's (CRTC's) _Call for comments regarding potential barriers to the deployment-capable networks in underserved areas in Canada_ (CRTC 2019-406). In this call for comments, the Commission has asked for responses to the following:

i.   Identify barriers that service providers and communities face in building new facilities, or interconnecting to or accessing existing facilities, to extend networks into underserved areas in order to offer universal service objective-level services

ii. Describe how and to what extend these barriers are preventing parties from extending transport networks and offering universal service objective-level services in underserved regions of Canada

iii. Propose potential regulatory measures that are within the Commission's jurisdiction, to address the identified barriers

iv. Any other related issue within the scope of the proceeding.

We appreciate the opportunity to continue to advocate for the interests of rural residents across Canada through this call for comments and would welcome opportunities to continue this conversation by presenting to the Commission, should the CRTC hold an appearing hearing. The following letter outlines our comments in response to key questions posed by the Commission, which are as follows:

- The current telecommunications regulatory model is ineffective and contributes to market-failure in the delivery of reliable, equitable, and affordable broadband infrastructure and Internet service levels to rural and remote regions in Canada.
- Rural and remote regions of Canada are diverse and current conceptions of these areas in broadband policy and investments ignore that both the 'hard' and 'soft' barriers to broadband deployment in rural, remote, and otherwise 'difficult to serve' regions of Canada will vary widely depending on the unique, place-specific contexts of each community or region.
- There is a significant gap in data, research, and evaluation of broadband availability and adoption, effectiveness of previous funding initiatives, and the current state of connectivity in rural and remote Canada.

In partnership with other rural research organizations, CRRF has previously provided briefs to the Senate Committee on National Finance[1] and the House of Commons Standing Committee on Industry, Science and Technology[2] on the critical importance of broadband connectivity for rural, remote, and northern communities – and the significant barriers that have and continue to challenge efforts to connect rural Canadians' ability.

Reliable, affordable, high-speed broadband is an essential service. It as critical to contemporary social and community development as well-maintained roads, safe drinking water, and electricity.[3] We commend the CRTC for formally recognizing this fact in 2016, when the Commission declared broadband Internet a basic telecommunications service.[4] In January of this year, the Broadcasting and Telecommunications Legislative Review (BTLR) Panel reiterated the importance of access to broadband by stating it is a "a necessity for full participation in the digital society and economy. In a society so intensely marked by the omnipresence of instant communication, the effective ability of everyone to truly participate in social and economic life and benefit from the opportunities inherent in the digital society and economy is dependent on the ability to access broadband connectivity. Connectivity is

[1] Infrastructure Impacts on Rural and Economic Development (2017). Joint submission to the Senate Committee on National Finance by the Canadian Rural Revitalization Foundation, Rural Development Institute of Brandon University, and Rural Policy Learning Commons, available online via http://crrf.ca/wp-content/uploads/2017/05/SenateFinanceRuralInfrastructure-3MAY2017.pdf
[2] Broadband Connectivity in Rural Canada (2017). Joint submission to the House of Commons Standing Committee on Industry, Science, and Technology by the Canadian Rural Revitalization Foundation, Rural Development Institute at Brandon University, and the Rural Policy Learning Commons, available online via http://crrf.ca/wp-content/uploads/2017/12/BroadbandConnectivityinRuralCanada-2017.pdf
[3] BDO. (2017). Broadband: The Next Essential Utility. Toronto. Retrieved from https://www.bdo.ca/en-ca/insights/consulting/risk-advisory/broadbandthe-next-essential-utility/
[4] CRTC. (2016). Telecom Regulatory Policy CRTC 2016-496. Retrieved from https://crtc.gc.ca/eng/archive/2016/2016-496.htm

now one of the conditions for the effective exercise of expressive freedoms."[5] Simply put, we can no longer accept that certain areas of Canada will have lower or no Internet service – bridging the digital divide is a matter of ensuring the provision of equal rights for rural, remote, or otherwise underserved areas. It is critical to frame any legislative, regulatory, and investment mechanisms in this context when considering and evaluating local, provincial, and national broadband infrastructure policies and programs.

Regulatory Loopholes and Setting the Bar Too Low

Despite broad recognition that connectivity is an essential service and a basic right, we have noticed that the telecommunications market has responded in troubling ways to increased efforts to support equitable service delivery for all Canadians (regardless of geography). In August 2019, five of the largest Internet and telecommunications providers in Canada threatened to cut their investments in broadband networks – particularly in rural and remote areas – when the CRTC lowered wholesale rates.[6] As such, it appears that a major barrier to broadband deployment in underserved areas is a lack of appropriate legislative and regulatory powers to compel telecommunications service providers (TSPs) to build infrastructure to these areas. All future regulatory and legislative efforts aimed at the telecommunications sector must ensure that individual corporations cannot 'legislate from the corner office'.

Similarly, beyond these fundamental issues, we encourage the Commission to critically evaluate what is considered an acceptable level of service. We were encouraged to see Telecom Regulatory Policy CRTC 2016-496 adopt higher expectations for minimum quality and speed standards.[7] However, minimum service standards have a tendency to backfire and become ceilings rather than floors. In setting the service standard to 50/10 Mbps by 2030, there is reason to be concerned that this will become a satisficing measure rather than a starting point. Target speeds are also quickly outpaced and 50/10 Mbps is a questionable service level for meeting current needs, let alone the future goals, needs, and aspirations of rural and remote residents. If broadband deployment is a matter of equity and rights, why should we set targets or goals for rural and remote regions far below service speeds currently available in urban areas (many of which are already receiving 1/1 Gbps and higher service speeds)? Finally, equitable access to broadband is also predicated on more than speed of service and must include provisions for quality of service, symmetry, latency, security, and other standards – and

---

[5] BLTR (2020). Canada's Communications Future: Time to Act. Retrieved online https://www.ic.gc.ca/eic/site/110.nsf/vwapj/BTLR_Eng-V3.pdf/$file/BTLR_Eng-V3.pdf - p.10
[6] Jackson, E. (2019). Telcos threaten to pull rural internet investment after CRTC lowers wholesale rates (2019). The Financial Post. Retrieved from https://business.financialpost.com/telecom/telecos-threaten-to-pull-rural-internet-investment-after-crtc-lowers-wholesale-rates
[7] CRTC. (2016). Telecom Regulatory Policy CRTC 2016-496. Retrieved from https://crtc.gc.ca/eng/archive/2016/2016-496.htm

these standards are often related to diversity of consumer choice in competitive markets, which are notable problems in rural and remote areas.

Building Capacity through Place-Based Policy

Related to challenges in both building broadband infrastructure and accessing supports for increasing service levels, there are a number of local barriers to broadband deployment in rural and remote areas. These include both the physical geography of these regions as well as a broad range of capacities to pursue, implement, and evaluate various infrastructure investment initiatives. Because rural communities differ not only from urban communities, but from each other, and are becoming increasingly responsible for their own development, national and subnational policies and programs can inadvertently become barriers to rural development if the diverse and specific place-based contexts, needs, and aspirations of different types of rural, remote, or other underserved areas are not recognized.[8]

Canada is a large and geographically varied country; this holds true not only across the country but even within the subnational jurisdictions of the provinces and territories. The challenges of deploying broadband infrastructure in Manitoba's muskeg will be different than connecting island or Arctic jurisdictions, just as burying fibre in the Canadian shield will be different than stringing cable in densely forested boreal landscapes.

Beyond spatial and topographic challenges, Canada's rural and remote regions also possess a broad range of capacities. Each community's financial, technical, and human resource capacity creates different challenges and opportunities in terms of their ability to identify and access funding support, respond to pressure from telecommunications service providers or other third-party bodies that may or may not have the community's best interests at heart, and consider and plan for both immediate and long-term infrastructure needs. For example, determining whether and how to apply to initiatives like the Broadband Fund requires a community to have a good working knowledge of the technical aspects of broadband, a trusting relationship with service providers, and the internal financial and staffing capacity to prepare applications (including the various data collection and research associated with preparing an application that might reasonably be funded). These varying capacities stand to have as much influence on which communities will receive investment as nearly any other factor described in this

---

[8] For more context, please see: Bollman, Ray D. & Reimer, B. (2018) "The dimensions of rurality: Implications for classifying inhabitants as 'rural', implications for rural policy and implications for rural indicators," Paper presented to the 30th International Conference of Agricultural Economists, July 28 to August 2, Vancouver. Retrieved from https://ageconsearch.umn.edu/record/277251/files/1467.pdf; Canadian Rural Revitalization Foundation. (2015). *State of Rural Canada 2015*. (Markey, Breen, Lauzon, Gibson, Ryser, & Mealy, Eds.). Canadian Rural Revitalization Foundation. Retrieved from http://sorc.crrf.ca/wp-content/uploads/2015/09/SORC2015.pdf; Markey, S. (2010). Primer on place-based development. Canadian Regional Development: A Critical Review of Theory, Practice and Potentials. Retrieved from http://cdnregdev.ruralresilience.ca/wp-content/uploads/2013/03/primerplacebaseddevelopment-markey.pdf; Reimer, B. (2006). The rural context of community development in Canada. Journal of Rural and Community Development, 1(2), 155–175; and Vodden, K., Gibson, R., & Baldacchino, G. (2015). Place peripheral: Place-based development in rural, island and remote communities. St. John's: ISER Press..

letter and must be addressed through a variety of supports, from legislative frameworks to investment streams. We caution that any solution to these challenges should not seek to remove or limit local control or decision-making in favour of centralized rationalization, but should seek to bolster local capacity to seek, evaluate, and support the solutions that work best for a given community or region. As such, all infrastructure initiatives must recognize that the costs and challenges associated with broadband deployment will vary widely, calling for policies and programs that are adaptive, scalable, and based in notions of equity (everyone receives the support they require in order to be successful) rather than equality (everyone receives the same support, regardless of context). The focus of these initiatives should be on flipping the script on broadband deployment to underserved from a 'last mile' perspective to a 'first mile' approach; this 'first mile' approach should support an active leadership role for rural regions that gives these communities more control to respond to their specific challenges and opportunities for broadband extension and adoption.[9]

Support Evidence-Based Decision Making through Research and Evaluation

Canada remains a 'data poor' country in terms of the amount of critical information, research, and evaluation performed and provided regarding the availability and adoption of broadband services. The degree to which previous policies and programs have been effective at increasing the availability and adoption of broadband services remains unclear, as very little longitudinal analysis has been performed on these initiatives and evaluation appears to fall to the bottom of the priority list as each new program is announced.[10] Where evaluation has been done, it has found that Canada has experienced declining performance in the extension and adoption of the latest advances in broadband technologies and the typical outcome of previous investment programs has been to support private gains for telecommunications firms while not fully realizing the socio-economic benefits and democratic potential of broadband infrastructure as a public good.[11] Some regional initiatives have estimated local broadband infrastructure deficits to be in the order of billions of dollars (such as the SouthWest Integrated Fibre Technology assessment of the challenges facing southwestern Ontario),[12] but, arguably, we do not have a solid understanding of what kind of infrastructure exists – and where. This lack of critical data has created a significant challenge to the effective

[9] Hallstrom, L.K., Heinrich, A., & Pearson, M. (2017). Beyond infrastructure: Strategies to support adoption and realized benefits of broadband in rural Canada (CS.III.3.3(. Alberta Centre for Sustainable Rural Communities. Accessible online at https://www.ualberta.ca/augustana/research/centres/acsrc/resources/reports?0=Broadband
[10] McNally, B., Rathi, D., Evaniew, J. & Wu, Y. (2018). Thematic analysis of eight Canadian federal broadband programs from 1994-2016. Journal of Information Policy, 7(2017), pp. 38-85.
[11] For context, see McNally, B., Rathi, D., Evaniew, J. & Wu, Y. (2018). Thematic analysis of eight Canadian federal broadband programs from 1994-2016. Journal of Information Policy, 7(2017), pp. 38-85; Middleton, C. (2017). Rural Ontario Foresight Papers Broadband Infrastructure for the Future Broadband Infrastructure for the Future. Retrieved from http://www.ruralontarioinstitute.ca/foresightpapers MuniNetworks. (2016); and Pant, L. P., & Hambly Odame, H. (2017). Broadband for a sustainable digital future of rural communities: A reflexive interactive assessment. Journal of Rural Studies, 54, 435–450.
[12] SWIFT. (2017). Intervention Re: Telecom Notice of Consultation CRTC 2017-12 - Development of the Commission's Broadband Funding Regime.

and efficient deployment of new infrastructure funds. As such, all current and future broadband initiatives must dedicate resources for funding and incorporating rigorous research and analysis of the current landscape, the results of interventions, and forecasts for future needs, in order to reduce the risk of simply re-embedding questionable assumptions as each program moves forward.

To this end, we have attached letters of support for our comments in this letter from the leaders of rural research centres from across Canada, including:

- The Alberta Centre for Sustainable Rural Communities, University of Alberta (Camrose, Alberta) – Dr. Lars Hallström, Director
- The Community Development Institute at the University of Northern British Columbia (Prince George, British Columbia) – Dr. Greg Health and Ms. Marleen Morris, Co-Directors
- The Harris Centre, Memorial University of Newfoundland (St. John's, Newfoundland) – Dr. Rob Greenwood, Director
- The Institute of Island Studies/UNESCO Chair in Island Studies and Sustainability, University of Prince Edward Island (Charlottetown, Prince Edward Island) – Dr. Laurie Brinklow, Co-ordinator
- The School of Environmental Design & Rural Development, University of Guelph (Guelph, Ontario) – Mr. Sean Kelly, Director
- The Rural Development Institute, Brandon University (Brandon, Manitoba) – Dr. Bill Ashton, Director
- The Rural Research Centre, Dalhousie University (Truro, Nova Scotia) – Dr. Kathleen Kevany, Director

Building the Future by Rethinking Broadband

We are in now in unprecedented times. As Canada and the world wrestles with the implications of the COVID-19 pandemic, we have seen almost every facet of our social and economic lives move online virtually overnight. While this has been done with the very best of intentions, we are seeing the ramifications of unequal access to reliable, affordable, high-speed broadband play out in real time. Whether through discrepancies in the time it takes Canadians to access support from the Canadian Emergency Relief Benefit (CERB), between those who can apply online versus those who need to apply by phone, the potential for those without access to connectivity to fall behind in their education as classrooms from kindergarten to doctoral programs move to online formats, or even the ability of rural municipal councils to conduct their business safely and remotely during this time – the move to a 'digital by default' approach has serious consequences when critical broadband infrastructure is not in place to ensure all Canadians can connect.

While this is a time of massive uncertainty, it also represents a tremendous opportunity for the Commission to work with all orders of government – and particularly provincial/territorial, regional, and local governments – as well as rural scholars and researchers to address the challenges we have outlined in our comments above as we navigate the uncharted waters ahead. As the Government of Canada and many provincial governments move forward with new funding initiatives and policy directives aimed at connecting rural and remote regions in Canada, we believe the CRTC is well-poised to develop clear frameworks that ensure these initiatives improve the quality of life for Canadians based on the principle of equity and the foundation of evidence.

In conclusion, our main position statements encourage the CRTC to:

- Work with all orders of government, across all jurisdictions, to develop stronger regulatory frameworks that emphasize broadband as a basic right and which prevent private corporations (such as TSPs) from exerting outsize and undue influence in determining which regions or which Canadians have access to broadband connectivity.
- Reconsider its position on acceptable service levels to reflect the importance of equity to ensure that rural residents are able to access the same quality, speeds, and choice among service providers as urban residents.
- Consider opportunities to work with all orders of government to develop place-based policy and programming that addresses core structural issues in rural and remote regions to effectively interact with the telecommunications market.
- Allocate a specific portion of the Broadband Fund to support longitudinal data collection and analysis, research, and evaluation – and work with all orders of government to ensure that any other funding initiatives related to telecommunications services include allocated funds for the same.

Thank you again for the opportunity to provide these comments. We look forward to future opportunities to share our insights with the Commission and would welcome the opportunity to appear before the Commission should you proceed with a hearing on this issue.

If you have any questions or require additional information, please contact Ashleigh Weeden at weedens@uoguelph.ca.

Sincerely,

Sarah Minnes, Ph.D
President
Canadian Rural Revitalization Foundation

Wayne Kelly
Project Coordinator
Rural Policy Learning Commons

Augustana Campus
Camrose, Alberta
T4V 2R3
Tel: 780.679.1672
Fax: 780.679.1129
acsrc@ualberta.ca
www.acsrc.ca

April 24, 2020

Secretary General Doucet and Members of the CRTC,

I am writing today on behalf of the Alberta Centre for Sustainable Rural Communities (ACSRC) to express our full support for the comments provided by the Canadian Rural Revitalization Foundation (CRRF) in partnership with the Rural Policy Learning Commons in response to the Canadian Radio-television and Telecommunications Commission Notice of Consultation CRTC 2019-406, Call for comments regarding potential barriers to the deployment of broadband capable networks in underserved areas in Canada.

As a member of the Rural Research Centres Network (R2CN), the ACSRC understands first hand the crucial importance of broadband connectivity for rural and remote researchers. Our network virtually connects leading rural research centres and institutions across Canada and internationally. Without critical broadband infrastructure, our organization and the R2CN would not be able to support important capacity building initiatives and service delivery by rural research centres in rural regions, including the valuable exchange of skills and knowledge and building important collaborative relationships for sharing resources and expertise that substantially impact rural policy and practice.

The barriers to broadband deployment in rural areas are significant, but not insurmountable, and require not only the expertise of technological experts, but of rural scholars and development practitioners who have particular expertise and insight into the unique social, economic, and spatial characteristics of rural and remote regions. The comments provided by CRRF highlight insights from rural scholars and practitioners – many of whom belong to institutes and organizations within the R2CN – that point to the key questions that the CRTC must consider during these challenging and unprecedent times as well as opportunities for re-imagining the way we approach broadband as critical infrastructure for rural and remote regions. We strongly support the comments provided and encourage the Commission to work CRRF and rural research institutes as it continues its efforts to connect underserved Canadians.

Sincerely,

Lars Hallström, PhD
Director, Alberta Centre for Sustainable Rural Communities
Professor, Political Studies (Augustana Faculty) and REES (ALES)
University of Alberta, Alberta, Canada

April 25, 2020

Secretary General Doucet and Members of the CRTC,
Ottawa, Ontario
K1A 0N2

RE: **Notice of Consultation CRTC 2019-406**

We are writing today on behalf of the Community Development Institute (CDI) at the University of Northern British Columbia to express our support for the comments provided by the Canadian Rural Revitalization Foundation (CRRF) in partnership with the Rural Policy Learning Commons in response to the Canadian Radio-television and Telecommunications Commission Notice of Consultation CRTC 2019-406, 'Call for comments' regarding potential barriers to the deployment of broadband capable networks in underserved areas in Canada.

Being embedded in rural Canada, and being a member of the Rural Research Centres Network (R2CN), the CDI understands first hand the crucial importance of broadband connectivity for rural and remote researchers. Our network virtually connects leading rural research centres and institutions across Canada and internationally. Without critical broadband infrastructure, our organization and the R2CN would not be able to support important capacity building initiatives and service delivery by rural research centres in rural regions, including the valuable exchange of skills and knowledge and building important collaborative relationships for sharing resources and expertise that substantially impact rural policy and practice.

As a community development research institute embedded in rural Canada, we also understand the critical importance of broadband connectivity to the economic future of rural regions. Without improved broadband connectivity, rural regions will not be able to take advantage of emerging opportunities in the global economy. This will create enormous economic and social inequity and a deep divide between rural and urban regions. Such inequity is not acceptable in Canada, where we value social and economic justice for all.

The barriers to broadband deployment in rural areas are significant, but not insurmountable, and require not only the expertise of technological experts, but of rural scholars and development practitioners who have particular expertise and insight into the unique social, economic, and

spatial characteristics of rural and remote regions. The comments provided by CRRF highlight insights from rural scholars and practitioners – many of whom belong to institutes and organizations within the R2CN – that point to the key questions that the CRTC must consider during these challenging and unprecedent times as well as opportunities for re-imagining the way we approach broadband as critical infrastructure for rural and remote regions.

We strongly support the comments provided and encourage the Commission to work with the CRRF and its rural research institutes as it continues its efforts to connect underserved Canadians.

Sincerely,

Greg Halseth
Professor, Geography Program
Canada Research Chair in Rural and Small Town Studies
Co-Director, Community Development Institute at UNBC
University of Northern British Columbia
3333 University Way
Prince George, B.C.
V2N 4Z9
tel: (250) 960-5826
email: greg.halseth@unbc.ca

Marleen Morris
Adjunct Professor, Geography Program
Co-Director, Community Development Institute at UNBC
University of Northern British Columbia
3333 University Way
Prince George, B.C.
V2N 4Z9
tel: (250) 960-9806
email: marleen.morris@unbc.ca

http://www.unbc.ca/community-development-institute

April 22, 2020

Secretary General Doucet and Members of the CRTC,

I am writing today on behalf of The Leslie Harris Centre of Regional Policy and Development at Memorial University of Newfoundland to express our full support for the comments provided by the Canadian Rural Revitalization Foundation (CRRF) in partnership with the Rural Policy Learning Commons in response to the Canadian Radio-television and Telecommunications Commission Notice of Consultation CRTC 2019-406, Call for Comments regarding potential barriers to the deployment of broadband capable networks in underserved areas in Canada.

As a member of the Rural Research Centres Network (R2CN), The Harris Centre understands first hand the crucial importance of broadband connectivity for rural and remote researchers. Our network virtually connects leading rural research centres and institutions across Canada and internationally. Without critical broadband infrastructure, our organization and the R2CN would not be able to support important capacity building initiatives and service delivery by rural research centres in rural regions, including the valuable exchange of skills and knowledge and building important collaborative relationships for sharing resources and expertise that substantially impact rural policy and practice.

The barriers to broadband deployment in rural areas are significant, but not insurmountable, and require not only the expertise of technological experts, but of rural scholars and development practitioners who have particular expertise and insight into the unique social, economic, and spatial characteristics of rural and remote regions. The comments provided by CRRF highlight insights from rural scholars and practitioners – many of whom belong to institutes and organizations within the R2CN – that point to the key questions that the CRTC must consider during these challenging and unprecedented times as well as opportunities for re-imagining the way we approach broadband as critical infrastructure for rural and remote regions. We strongly support the comments provided and encourage the Commission to work CRRF and rural research institutes as it continues its efforts to connect underserved Canadians.

Sincerely,

Rob Greenwood Ph.D.
Associate Vice President (Public Engagement and External Relations) and
Director, The Harris Centre

UNIVERSITY
of Prince Edward
ISLAND

April 20, 2020

Secretary General Doucet and Members of the CRTC,

I am writing today on behalf of the Institute of Island Studies to express our full support for the comments provided by the Canadian Rural Revitalization Foundation (CRRF) in partnership with the Rural Policy Learning Commons in response to the Canadian Radio-television and Telecommunications Commission Notice of Consultation CRTC 2019-406, Call for comments regarding potential barriers to the deployment of broadband capable networks in underserved areas in Canada. As a member of the Rural Research Centres Network (R2CN), we understand first hand the crucial importance of broadband connectivity for rural and remote researchers – particularly in our province of Prince Edward Island where the lack of adequate Internet service is an ongoing issue outside of the cities of Charlottetown and Summerside.

Our network virtually connects leading rural research centres and institutions across Canada and internationally. Without critical broadband infrastructure, our organization and the R2CN would not be able to support important capacity-building initiatives and service delivery by rural research centres in rural regions, including the valuable exchange of skills and knowledge and building important collaborative relationships for sharing resources and expertise that substantially impact rural policy and practice.

The barriers to broadband deployment in rural areas are significant, but not insurmountable, and require not only the expertise of technological experts, but of rural scholars and development practitioners who have particular expertise and insight into the unique social, economic, and spatial characteristics of rural and remote regions. The comments provided by CRRF highlight insights from rural scholars and practitioners – many of whom belong to institutes and organizations within the R2CN – that point to the key questions that the CRTC must consider during these challenging and unprecedented times as well as opportunities for re-imagining the way we approach broadband as critical infrastructure for rural and remote regions. We strongly support the comments provided and encourage the Commission to work CRRF and rural research institutes as it continues its efforts to connect underserved Canadians.

Sincerely,

Laurie Brinklow, MAIS, PhD, Co-ordinator
Institute of Island Studies | UNESCO Chair in Island Studies and Sustainability
Tel. (902) 894-2881 | E-mail Brinklow@upei.ca

550 University Avenue, Charlottetown, Prince Edward Island, Canada C1A 4P3   *people ▪ excellence ▪ impact*

Canadian Radio-television and
Telecommunications Commission
655 Bay Street, Suite 403
Toronto, Ontario M5G 2K4

28 April 2020

Secretary General Doucet and Members of the CRTC,

RE: Notice of Consultation CRTC 2019-406, Call for Comments

On behalf of the School of Environmental Design and Rural Development, I am writing to express our full support for the comments provided by the Canadian Rural Revitalization Foundation (CRRF), in partnership with the Rural Policy Learning Commons, in response to the Canadian Radio-television and Telecommunications Commission Notice of Consultation CRTC 2019-406, Call for comments regarding potential barriers to the deployment of broadband capable networks in underserved areas in Canada.

The School of Environmental Design and Rural Development (SEDRD) brings together major academic fields concerned with creating strong communities, in Canada and around the world. SEDRD reflects the imperatives in building authentic communities where planners, leaders, communicators, community designers, the citizens and politicians all play important interdependent roles in community strength. This proposal builds on the core tenets of the School, its graduate students, and our faculty. The School consists of 21 faculty members and over 250 graduate students all conducting research related to rural people, places, and landscapes.

We understand first-hand the crucial importance of broadband connectivity for rural and remote researchers. Our network virtually connects leading rural research centres and institutions across Canada and internationally. Without critical broadband infrastructure, our organization would not be able to support important capacity building initiatives and service delivery by rural research centres in rural regions, including the valuable exchange of skills and knowledge and building important collaborative relationships for sharing resources and expertise that substantially impact rural policy and practice.

The barriers to broadband deployment in rural areas are significant, but not insurmountable, and require not only the expertise of technological experts, but of rural scholars and development practitioners who have particular expertise and

School of Environmental Design and Rural Development
50 Stone Road East
Guelph, Ontario, Canada N1G 2W1
T 519-824-4120 x53353
sedrd@uoguelph.ca
uoguelph.ca/sedrd

IMPROVE LIFE.

insight into the unique social, economic, and spatial characteristics of rural and remote regions.

The comments provided by CRRF highlight insights from rural scholars and practitioners – many from the School, that point to the key questions that the CRTC must consider during these challenging and unprecedent times as well as opportunities for re-imagining the way we approach broadband as critical infrastructure for rural and remote regions. We strongly support the comments provided and encourage the Commission to work with CRRF and rural research institutes as it continues its efforts to connect underserved Canadians.

Sincerely,

Sean Kelly, *Director | SEDRD*

E *sean.kelly@uoguelph.ca*

T 519-824-4120 x56870

IMPROVE LIFE.

April 17, 2020

Re: Secretary General Doucet and Members of the CRTC,

I am writing today on behalf of Brandon University's Rural Development Institute to express our full support for the comments provided by the Canadian Rural Revitalization Foundation (CRRF) in partnership with the Rural Policy Learning Commons. They are responding to the Canadian Radio-television and Telecommunications Commission's Notice of Consultation CRTC 2019-406, Call for comments regarding potential barriers to the deployment of broadband capable networks in underserved areas in Canada.

As a member of the Rural Research Centres Network (R2CN), the Rural Development Institute understands first hand the crucial importance of broadband connectivity for rural and remote researchers. Our research, publications, presentations and media coverage over the years (listed in Appendix 1), echo the concerns and the call to action in the brief by CRRF.

The R2CN virtually connects leading rural research centres and institutions across Canada and internationally. Without critical broadband infrastructure, our organization and the R2CN would not be able to support important capacity building initiatives and service delivery by rural research centres in rural regions, including the valuable exchange of skills and knowledge and building important collaborative relationships for sharing resources and expertise that substantially impact rural policy and practice.

The barriers to broadband deployment in rural areas are significant, but not insurmountable, and require not only the expertise of technological experts, but of rural scholars and development practitioners who have particular expertise and insight into the unique social, economic, and spatial characteristics of rural and remote regions. The comments provided by CRRF highlight insights from rural scholars and practitioners – many of whom belong to institutes and organizations within the R2CN – that point to the key questions that the CRTC must consider during these challenging and unprecedent times as well as opportunities for re-imagining the way we approach broadband as critical infrastructure for rural and remote regions. We strongly support the comments provided and encourage the Commission to work CRRF and rural research institutes as it continues its efforts to connect underserved

1

Canadians. To this end, I am providing this letter on behalf of RDI to support the CRRF application, and I look forward to participating in the upcoming event. By signing this letter, we are committing, conditional upon the receipt of funds from SSHRC to CRRF, the contributions described above and our active participation in the partnership. Should you require any further information, please do not hesitate to contact me.

Dr. William Ashton, MCIP,
Director, Rural Development Institute
Brandon University

T. 204 571-8513 C. 204 570 0136
ashtonw@brandonu.ca

Appendix 1. **Journal of Rural and Community Development** (Special Issue on Rural Broadband)

Vol 8, No 2 (2013)

Rural and Remote Broadband Deficit in Canada

Table of Contents

Editorial

The Remote Rural Broadband Deficit in Canada
A Scott Carson

Articles

Rural Broadband Development in Canada's Provinces: An Overview of Policy Approaches
Reza Rajabiun, Catherine Middleton

The New Telecommunications Sector Foreign Investment Regime and Rural Broadband
Michael B McNally, Samuel E Trosow

Beyond Infrastructure: Broadband for Development in Remote and Indigenous Regions
Heather E Hudson

Reducing the Digital Divide in Rural Manitoba: A Proposed Framework
William Ashton, Roger Girard

How Women in Remote and Rural First Nation Communities are Using Information and Communication Technolog
Penny Carpenter, Kerri Gibson, Crystal Kakekaspan, Susan O'Donnell

Social Media for Enhancing Innovation in Agri-food and Rural Development: Current Dynamics in Ontario, Canada
Ataharul Chowdhury, Helen Hambly Odame

Other Publications & Presentations

Kelly W. 2019. Portrait of Digital Rural Youth. Canadian Rural Revitalization
Foundation Conference (Poster Presentation Competition – 2nd place
winner), St. John's, Newfoundland. [Role: author, presenter/designer]

Ashton, W. & **Kelly, W.**, 2019. Innovation, Broadband and Community Resilience.
Chapter in: The Routledge Handbook of Comparative Rural Policy. Eds
Vittuari, M, Devlin, J., Pagani, M. & Johnson, T.. Routledge, Oxon, New
York. [Role: co-author, researcher]

Kelly, W. 2019. Bridging the Gap in Broadband. Economic Development
Association of Manitoba Forum 2019 Keynote Panel. Selkirk, Manitoba.
[Role: presenter, author]

Kelly, W. 2019. Exploring the participation of rural youth in a digital society. Rural on Purpose Rural Youth Engagement Murmuration Webinar. October 23, 2019. [Role: presenter, author]

Kelly, W. 2019. Bridging the Digital Divide for Rural Canada. Rural Spark Podcast, March 27, 2019 [Role: Contributor]

Kelly, W. & Hynes, M. 2018. Remotely connected? A comparative analysis of the development of rural broadband infrastructure and initiatives. Chapter in: Service provision and rural sustainability: infrastructure and innovation. Eds. Halseth, G., Markey, S. and Ryser, L.. Routledge, Oxon, New York.. [Role: co-author, researcher]

Akimowicz, M. & **Kelly, W**. 2018. You win some, you lose some: lessons from a community-based research project on digital technologies in rural communities. Canadian Rural Revitalization Foundation Conference, Saskatoon, Saskatchewan. [Role: co-author, co-researcher, co-presenter]

Kelly, W. 2017. Broadband Internet in Rural Canada. Rural Routes Podcast, Season 2, Episode 5 [Role: Contributor]

Kelly, W. 2017. Broadband, Technology and Our Future Workforce. Panel Member, Building a 21st Century Workforce Learning Summit. Nelson, British Columbia. [Role: presenter, author]

Kelly, W. 2017. Rural Broadband and the importance of building a culture of use for rural communities. Panel Member, Rural Crossroads: Challenges and Opportunities for Rural Development, Bologna, Italy [role: presenter, author]

Kelly, W, 2016. State of Rural Broadband in Manitoba, Canada. "Fiber for New Economy" Broadband Communities Magazine Economic Development Conference, Minneapolis, October 2016. [Role: Presenter, author, researcher]

Kelly, W. & McCullough, S. 2016. State of Rural Broadband in Manitoba. Rural Development Institute, Brandon University. [Role: lead author, researcher]

Kelly, W, 2016. State of Rural Broadband Manitoba, Canada. Presentation to Leader Companies Broadband Committee, Portlaoise, Ireland. [Role: presenter, author, researcher]

Kelly, W. 2016. Rural Broadband Innovations. Building Vibrant Rural Futures Rural Policy Learning Commons – Canadian Rural Revitalization Foundation Conference, Guelph, Ontario. [Role: author, presenter]

Kelly W., 2016. Rural Broadband Solutions Panel Discussion. Building Vibrant Rural Futures Rural Policy Learning Commons – Canadian Rural Revitalization Foundation Conference, Guelph, Ontario. [Role: panel member]

Kelly, W. 2016. The State of ICTs in rural and northern Manitoba. Nordic Ruralities: Crisis and Resilience Conference, Akureyri, Iceland. [Role: author, presenter]

Kelly, W., Ashton, W. 2015. Rural communities are not realizing the potential of the Internet – can today's youth flip the script? Presented at the Building Community Resilience, 2015 National Conference, Canadian Rural Revitalization Foundation, Summerside, PEI. [Role: lead author, presenter]

Andersen, J., **Kelly W**., McNally, M, Nelson, P., Price, A., Salou, H., Vennard, L. 2015. Panel discussion participant: Issues and Next steps for Rural Broadband Enablement. Anderson. Digital Futures Symposium on Rural Broadband Enablement, Olds, Alberta [Role: panelist member]

Kelly W., 2015. Broadband and Rural Development: Is rural broadband more than watching Netflix? International Comparative Rural Policy Studies, Ireland. [Role: author, presenter]

Media Coverage

Kelly, W. 2019. Reliable cellular signals still an issue in rural Newfoundland and Labrador. Interview with Saltwire Network, September 19, 2019. [Role: contributor] https://www.saltwire.com/news/local/reliable-cellular-signals-still-an-issue-in-rural-newfoundland-and-labrador-354311/?location=corner-brook

Kelly, W. 2019. Manitoba premier blames CRTC rate change for Bell's cut to rural Internet program. Interview with CBC News, August 28, 2019. [Role: contributor] https://www.cbc.ca/news/canada/manitoba/bell-mts-internet-highspeed-pallister-merger-wireless-1.5256137

Kelly, W. 2019 Rural Renaissance Workers? Oh Yes.. They are here! Interview with VentureMuskoka, March 25, 2019. [Role: contributor] https://venturemuskoka.ca/2019/03/25/rural-renaissance-workers-oh-yes-they-are-here/

Kelly, W, 2019. Signs of a rural renaissance as Canadian cities overheat: Don Pittis. Interview with CBC News, March 4, 2019. [Role: contributor] https://www.cbc.ca/news/business/rural-economic-development-1.5037041

Kelly, W. 2019. Neudorf's only grocery store closing down. Interview with CTV Yorkton, February 15, 2019. [Role: contributor] https://regina.ctvnews.ca/neudorf-s-only-grocery-store-closing-down-1.4299736

Kelly, W. 2016. Internet service, speeds lacking in pockets of Manitoba, study finds. Interview with CBC News, December 22, 2016. [Role: contributor] https://www.cbc.ca/news/canada/manitoba/rdi-internet-study-1.3909908

April 20, 2020

Dear Secretary General Doucet and Members of the CRTC,

Please accept this letter as the expression of full support from Dalhousie University's Faculty of Agriculture, Rural Research Collaborative (RRC) for Canadian Rural Revitalization Foundation's (CRRF) submission in partnership with the Rural Policy Learning Commons. We support this response to the Canadian Radio-television and Telecommunications Commission Notice of Consultation CRTC 2019-406. We are pleased to help illuminate potential barriers to the deployment of broadband capable networks in underserved areas in Canada.

As the Lead for the Rural Research Centres Network (R2CN), I understand first hand the crucial importance of broadband connectivity for rural and remote researchers. Our network virtually connects leading rural research centres and institutions across Canada and internationally. Without critical broadband infrastructure, our organization and the R2CN would not be able to support important capacity building initiatives and service delivery by rural research centres in rural regions, including the valuable exchange of skills and knowledge and building important collaborative relationships for sharing resources and expertise that substantially impact rural policy and practice.

The barriers to broadband deployment in rural areas are significant, but not insurmountable, and require not only the expertise of technological experts, but of rural scholars and development practitioners who have particular expertise and insight into the unique social, economic, and spatial characteristics of rural and remote regions. The comments provided by CRRF highlight insights from rural scholars and practitioners – many of whom belong to institutes and organizations within the R2CN – that point to the key questions that the CRTC must consider during these challenging and unprecedent times as well as opportunities for re-imagining the way we approach broadband as critical infrastructure for rural and remote regions. We strongly support the comments provided and encourage the Commission to work CRRF and rural research institutes as it continues its efforts to connect underserved Canadians.

Sincerely,

Kathleen Kevany

Associate Professor   *   Director of Rural Research Centre
56 Rock Garden Road   *   Humanities House   *   Department of Business and Social Sciences
Faculty of Agriculture   *   Dalhousie University   *   P.O. Box 550   *   Truro, Nova Scotia   B2N 5E3
Ph: (902) 893-6725   *   Cell: (902) 986-8477   *   E-mail: kkevany@dal.ca