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Dear Dr. Larry Gross,

This letter accompanies our submission of "Making sense of digital inclusion in Northern contexts: People's conceptions of and responses to digital connectivity challenges in the Northwest Territories, Canada" to the *International Journal of Communication*. This paper was co-written with Dr. Murat Akcayir and Dr. Michael McNally from the University of Alberta.

Our manuscript seeks to make a contribution to literature on first-level digital divides in geographically remote, Northern communities. First, we note that our analysis contributes to the very limited empirical data about first-level divides in this setting. We triangulate data regarding connectivity challengings in small, fly-in Indigenous communities that we collected from community surveys, interviews and online Internet performance tests. Our findings confirm existing research and offer perspectives from residents of small, geographically dispersed NWT communities often excluded from research.

Second, we believe that the paper contributes to first-level digital divide theory by expanding on the 'paradox of telecommunications development in remote regions' model, which was presented by O'Donnell and Beaton in 2018, but requires further development. Our paper updates this model through a network analysis that demonstrates the dynamic and interrelated nature of access challenges in Northern rural contexts. We argue that multiple access challenges relate to one another, generating a 'spiral of digital inequality' that compounds the negative effects of first-level digital divides experienced by people in small rural communities.

Finally, in the absence of adequate digital access, we demonstrate how Northern rural residents have adapted and innovated within their lived conditions, adjusting their behaviour and responding to the challenges they experience. While this demonstrates their agency and creativity, it also highlights the deep structural challenges they must contend with. This points to the need for more responsive and inclusive solutions that reflect the conditions present in diverse Northern and rural contexts.

Thank you for your consideration of this manuscript. We look forward to your response to our submission.

Best regards,

Rob McMahon

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