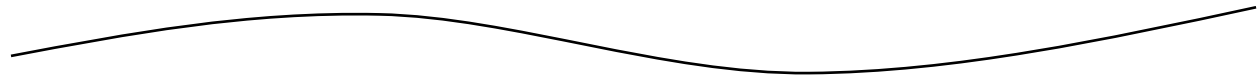


Left in The Shadows

Team: Geography is Where It's At

Members: Erin Hilliard, Lili Smolinski

ECCE App Challenge 2021



Mission Statement:

It is no secret that many Canadians are proud to live in the country that we do. In the big picture, we do have a reason to be. Compared to our next-door neighbour in the South, we employ better social policies, have cheaper cost of education, and of course provide universal healthcare for our citizens, to pick a few differences. It is easy, however, to assume if services are offered at all that they are offered everywhere. Unfortunately, this is not the case for much of rural Canada, and numerous communities face disparity in access to basic services. Among these, indigenous reserves are the most affected, for a variety of reasons.

In 2011, the Status Report of the Auditor General followed up on recommendations it had made to the government, over the decade prior, to reduce inequality within indigenous communities. While some legislative issues seem to have been tackled, it was found that the education gap between Indigenous reserves and the rest of Canada had widened, and many key infrastructure goals had not been met¹. These towns and villages often account for the most remote populated areas in their respective provinces or territories and can have hundreds of kilometers of distance between population centers. Beyond the difficulty of having to import most goods, this also has the effect of restricting community revenue streams, leading to insufficient resources for development projects when federal funds run out².

What is required is reliable, easily accessible funding that is flexible enough to address needs on a community-to-community basis: "We have to separate these problems to simplify and solve them." (LaFontaine, CBC News, 2018). Suggesting solutions to these issues is not the goal of this application, as it is far beyond our scope. Provided is a clear picture of current and future infrastructure development projects across Ontario as they pertain to reserves, as well as reservation access and healthcare services. We aim to provide an application that functions as an educational tool for both the public and investment parties of interest.

Description:

This application was made using ESRI's ArcGIS Web AppBuilder and their desktop application ArcGIS Pro. Presented in a story-map format, it features two main sections, Accessibility and Infrastructure Development. The first section contains 2 maps:

- An accessibility map of reserves with no year-round road access
- A map of healthcare facilities and hospitals within 1km and 10km ranges respectively

The second section is a time-series map production that begins in January 2021 and extends to the end of the year. Key Ontario development projects within reserve boundaries have been visualised, including:

- Community services
 - Water/sewage main upgrades and maintenance, public building construction/expansion, etc.
- Education
 - Expansion or establishment of schools
- Roads and transit
 - Repair and construction of new routes or bypasses, for example

Our app is structured overall as a scrolling story map, but this does not affect the functionalities of the individual maps. Exploring the dataset is encouraged, especially on the Infrastructure section, as included in the point data is features such as funding amount (in Million \$), completion state, and expected outcome.

Data Sources:

All data accessed and used for this project was obtained from open data centers, listed below is the link to the source and a description of the data:

1. Indigenous Reserve boundaries, Open-Data Canada:
<https://open.canada.ca/data/en/dataset/b6567c5c-8339-4055-99fa-63f92114d9e4>
2. Ministry of Health Service Provider Locations, Ontario GeoHub:
<https://geohub.lio.gov.on.ca/datasets/ministry-of-health-service-provider-locations>
3. Ontario Build: key infrastructure projects, Ontario Open Data Catalogue:
<https://data.ontario.ca/dataset/ontario-builds-key-infrastructure-projects>

References:

1. Office Of the Auditor General of Canada, “2011 June Status Report of the Auditor General of Canada; Chapter 4 – Programs for First Nations on Reserves”, June 2011. Accessed from: https://www.oag-bvg.gc.ca/internet/English/parl_oag_201106_04_e_35372.html#hd3c
2. Senate Committee on Aboriginal Peoples, “On-Reserve Housing and Infrastructure: Recommendations for Change”, June 2015. Accessed from: <https://sencanada.ca/content/sen/Committee/412/appa/rep/rep12jun15-e.pdf>
3. Lafontaine, Alik. “Close the gap between Indigenous health outcomes and the rest of Canada” CBC, <https://www.cbc.ca/news/indigenous/opinion-indigenous-health-alika-lafontaine-1.4547798> , Accessed March 2021.