

Leveraging GIS into the Socio-Economic Realm at the Government of Alberta

John Statham & Isabelle Beaudin
*Office of Statistics and Information (OSI),
Government of Alberta*

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Organizational Overview

- Government of Alberta (GoA)
 - > Ministry of Treasury Board & Finance (TBF)
 - > Office of Statistics and Information (OSI)
- OSI legislated to plan, consolidate, develop, and promote Alberta's demographic, economic and social statistics
- Work with both the public and all GoA ministries, especially those with socio-economic data

Organizational Overview

- Geospatial Statistics team objectives
 - Provide socio-economic mapping services
 - Perform socio-economic spatial analysis/ modeling
 - Prepare and disseminate spatialized socio-economic data
 - Offer access to socio-economically themed geospatial best practices/ tools/ resources/ SME's
 - No cost recovery; confidential; leverage existing GoA infrastructure
- ESRI platform our key software since our formal inception as an OSI team in 2016

Geospatial Statistics Projects

- Terrestrial vs. socio-economic GIS within the GoA
 - Spatializing administrative data
- Some of our socio-economic projects:
 - Distribution of clients in relation to Alberta Support Centers
 - Predictive Fort McMurray 2016 wildfire insurance impacts
 - Physical accessibility to post secondary institutions
 - Redefining of Designated Place (DPL) boundaries
 - School enrollment vs. neighborhood demographics
 - 2019 Provincial Electoral Division profiles (2016 Census)

<https://arcg.is/1P8iTK>

Seniors and Housing Project

- Affordable Housing Spatial Support project
 - Identify areas of the province in most need with respect to affordable housing to align decision making and funding priorities
 - Started planning and engagement in fall 2017 with deputy minister (DM) alignment and support
 - Currently includes spatialized data on infrastructure capacity, clientele information, census demographic data, custom built indexes, etc.
 - Employed the use of ArcGIS Online, Web AppBuilder for ArcGIS, ArcGIS Desktop, ArcGIS Pro (Insights for ArcGIS still to come)

Seniors and Housing Project

- ArcGIS Online
 - Powerful dissemination and analytical tool
 - Browser based access (no software to install)
 - Ties well into other softwares and products
 - Secure and customizable to control access permissions
 - Intuitive and easy to learn with a non-GIS audience
- Live demo of our ArcGIS Online web application

Demo

Next Steps

- Moving more towards an enhanced and predictive model based on:
 - Extrapolating the future aging of the population
 - Further refining of the vulnerability indices
 - Spatial regression analysis
 - Custom data extractions from Statistics Canada
 - Adding historical data
 - Training staff
 - Ongoing data maintenance

Summary

- Ministry of Seniors and Housing very excited at having at their disposal this model to aid their decision making mechanisms and identify funding priorities
- ArcGIS Online, Web AppBuilder for ArcGIS, ArcGIS Desktop and ArcGIS Pro the right tools to complete this important initiative. Insights for ArcGIS will add future value as well
- The socio-economic realm of the Government of Alberta is now better supported via Geospatial Statistics in terms of hands-on GIS support

Thank you!
Questions/ Comments?