

# Leveraging the Power and Potential of Spatialized Socio-Economic Information within the Government of Alberta

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Company: Government of Alberta

# Quick Introductions

- John Statham

- Manager, Geospatial Statistics

Ting Wei

- GIS Analyst, Geospatial Statistics

Isabelle Beaudin

- Geospatial Data Analyst, Geospatial Statistics

- Over 45 years experience in what we do

# Organizational Overview

- Government of Alberta (GoA)
  - > Ministry of Treasury Board & Finance (TBF)
    - > Office of Statistics and Information (OSI)
      - > Geospatial Statistics
- 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

# SSF - Intro

- Many of the above services defined via the Statistical Spatial Framework (SSF)
  - Strategic alignment within the GoA
  - Current state assessment (environmental scan, data review, surveys, gap analysis)
  - Case studies
  - Cost benefit analysis
  - Business case recommendations (for implementation)

# SSF - Findings

- Gaps in geospatial services/ capabilities/ resources largely did not exist for many GoA ministries
  - Terrestrial GIS well established already within GoA, but not for the socio-economic realm
- Implemented SSF project based on overarching principles of accessibility, awareness, and equity

# SSF - Benefits

- Designed to save GoA real time and money
  - Avoids costly contracting of services outside of GoA or hiring additional SME's
  - Leverages existing infrastructure/ programs
  - Overall, supports better policy and decision making processes for socio-economically focused ministries
- Has led to the development of some interesting geospatial projects...

# Geospatial Projects

- 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.

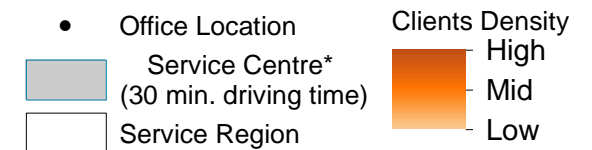
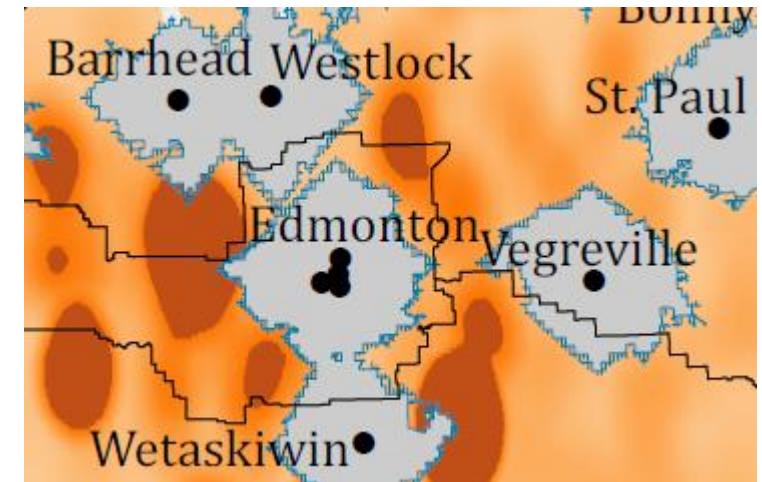
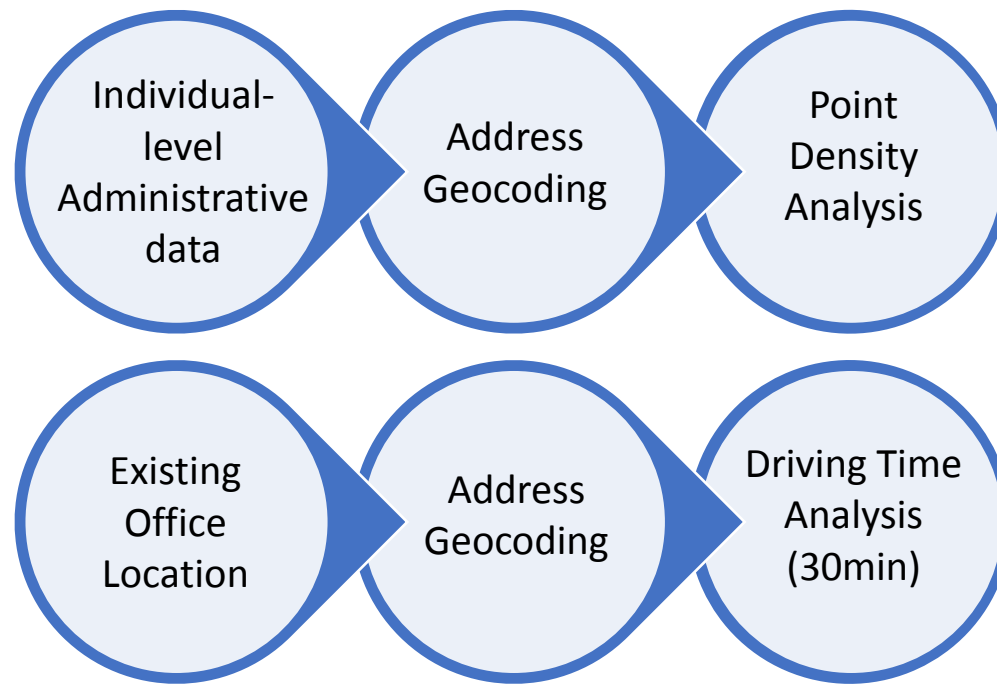


# Geospatial Projects

- 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
  - Staff training, ongoing data maintenance
- Many other geospatial projects...

# Service Capacity Analysis

Question: Where are our clients that we are not effectively servicing via our existing offices?



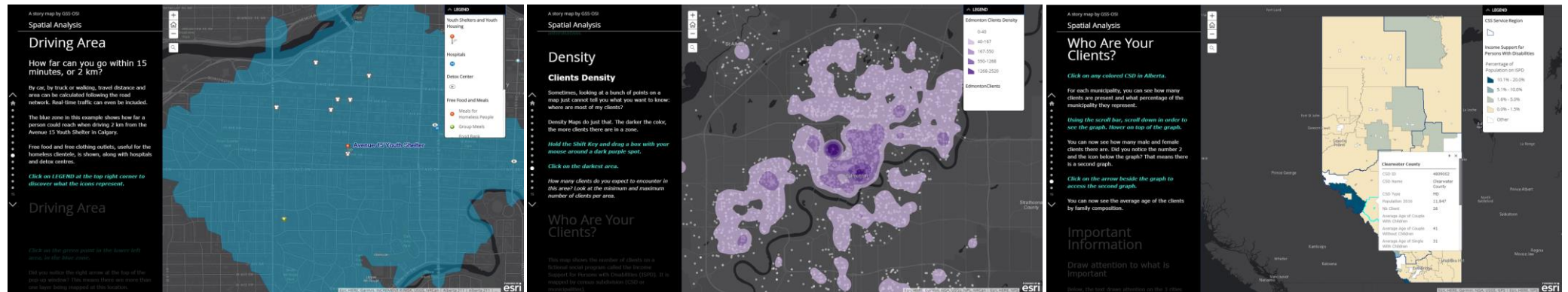
# Provincial Electoral Division (PED) Profiles

- Specifically tabulated from the 2016 Census of Canada (Block face pts-PED concordance)
- Provides detailed demographic and socio-economic information
- [ArcGIS Online Map](#)



# GIS Educational Story Map

- A mix of maps, texts and images
- Explain GIS concepts within the socio-economic context
- ArcGIS Online Story Map



# Summary

- Many fascinating and intricate geospatial projects done to date
- The socio-economic realm of the GoA is now better supported via Geospatial Statistics in terms of hand-on GIS support
  - Via efficient, transparent work that is meeting its defined goals and objectives
  - Only touching on the tip of the iceberg compared to what is possible

# Thank You

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**Geospatial Statistics (OSI) website:**

<https://www.alberta.ca/geographic-geospatial-statistics.aspx>