Nova Scotia Health and Well-being Atlas

Mikiko Terashima
Spatial Intelligence for Health Knowledge (SILK)-Lab
Dalhousie University

ESRI Canada User Conference - Halifax
November 6, 2013
‘Evidence-based’ decision-making in health policy and program planning
Challenges

- Time consuming
- Competing priorities
- Limited financial and human resources
- Data limitations (small population and sample size)
- Data accessibility and sharing protocols
Nova Scotia Health and Well-being Atlas

http://www.silk-lab.org

Starting with NS
Benefits of ArcGIS web mapping templates

- Embeddable into a website
- Finished look without programming knowledge
- No additional cost
- Some custom map functions
- Zoom-in/zoom-out
- No software required on users’ end
Fast food availability
Life expectancy for women
Material deprivation & social isolation

Quintile of Material Deprivation and Social Isolation 2006
Five classes of socioeconomic status (deprivation) and social isolation across Nova Scotia based on Canadian Census
Community types (rurality)

Community Types

Description

The five classes of community types were assigned based on population density per km road for each community using Geometric intervals, which divides values into groups in a way that within-group variance is minimum, adjusting for the settlement types. Settlement types (e.g., Urban Halifax, suburb (adjacent to urban Halifax), those with more than 2 road grids as settlement centres) were determined visually using the Google Earth satellite image.
Community Types

Description

The five classes of community types were assigned based on population density per km road for each community using Geometric intervals, which divides values into groups in a way that within-group variance is minimum, adjusting for the settlement types. Settlement types (e.g., Urban Halifax, suburb adjacent to urban Halifax), those with more than 2 road grids as settlement centres) were determined visually using the Google Earth satellite image.
Community Types

Description

The five classes of community types were assigned based on population density per km road for each community using Geometric Intervals, which divide values into groups in a way that within-group variance is minimum, adjusting for the settlement types. Settlement types (e.g., Urban Halifax, suburb (adjacent to urban Halifax), those with more than 2 road grids as settlement centres) were determined visually using the Google Earth satellite image.
Community Types

Description

The five classes of community types were assigned based on population density per km² for each community using Geometric Intervals, which divides values into groups in a way that within-group variance is minimum, adjusting for the settlement types. Settlement types (e.g., Urban Halifax, suburb (adjacent to urban Halifax), those with more than 2 road grids as settlement centres) were determined visually using the Google Earth satellite image.

Legend

Main Towns & Cities

District Health Authorities

Community Types

- Urban Halifax, Satellite Town
- Centres & Densely Populated Areas
- Suburbs & Mid-size Towns
- Small Towns
- Villages
- Very Sparse Settlements
- Indian Reserves

Canning

- Total Population: 2,758
- LEBF2: 81.4
- LEBM2: 74.5
- Fast food joint per 1,000 persons: 0.00
- Material deprivation quintile: 2
- Social isolation quintile: 3

Zoom to
Community Types

Description

The five classes of community types were assigned based on population density per km road for each community using Geometric Intervals, which divides values into groups in a way that within-group variance is minimum, adjusting for the settlement types. Settlement types (e.g., Urban Halifax, suburb (adjacent to urban Halifax), those with more than 2 road grids as settlement centres) were determined visually using the Google Earth satellite image.
Community Types

Description

The five classes of community types were assigned based on population density per km road for each community using Geometric Intervals, which divides values into groups in a way that within-group variance is minimum, adjusting for the settlement types. Settlement types (e.g., Urban Halifax, suburb (adjacent to urban Halifax), those with more than 2 road grids as settlement centres) were determined visually using the Google Earth satellite image.
Total 30-Day Prescription Fills per Beneficiary
(Year: 2010; Region Level: HRR)
TOTAL 30-DAY PRESCRIPTION FILLS PER BENEFICIARY
(Year: 2010; Region Level: HRR)

Customize Report

<table>
<thead>
<tr>
<th>YEAR:</th>
<th>REGION TYPE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Hospital Referral Region</td>
</tr>
</tbody>
</table>
Conclusion

- Increase user friendliness
- More community-level indicators with available data

- More take-up of evidence
- Increased data & information sharing
Thank you!

- Nova Scotia Department of Health and Wellness
- Nova Scotia Community Counts
- Dalhousie University GIS Centre
- ESRI