

GEOG 204

LECTURE 6
Census Data

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Census Data

- Statistics Canada conducts the Census of Population to provide a snapshot of Canada one specific day
- Every five years
 - 2 questionnaires
 - Short form (100% of the population)
 - Longform (20% of the population)
 - Mandatory (except 2011)
 - Random sample

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Census Data

- The primary source of socioeconomic data
 - Population and dwelling counts
 - Families, households and marital status
 - Income
 - Indigenous peoples
 - Housing
 - Mobility and migration
 - Education
 - Labour
 -

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Census Data

- Used by researchers across the country
 - Housing and real-estate
 - Social economic conditions
 - Immigrants
 - Minorities
 - Rural communities
 - Language
 - Public health
 - Economic outcomes of post secondary education
 - Commerce

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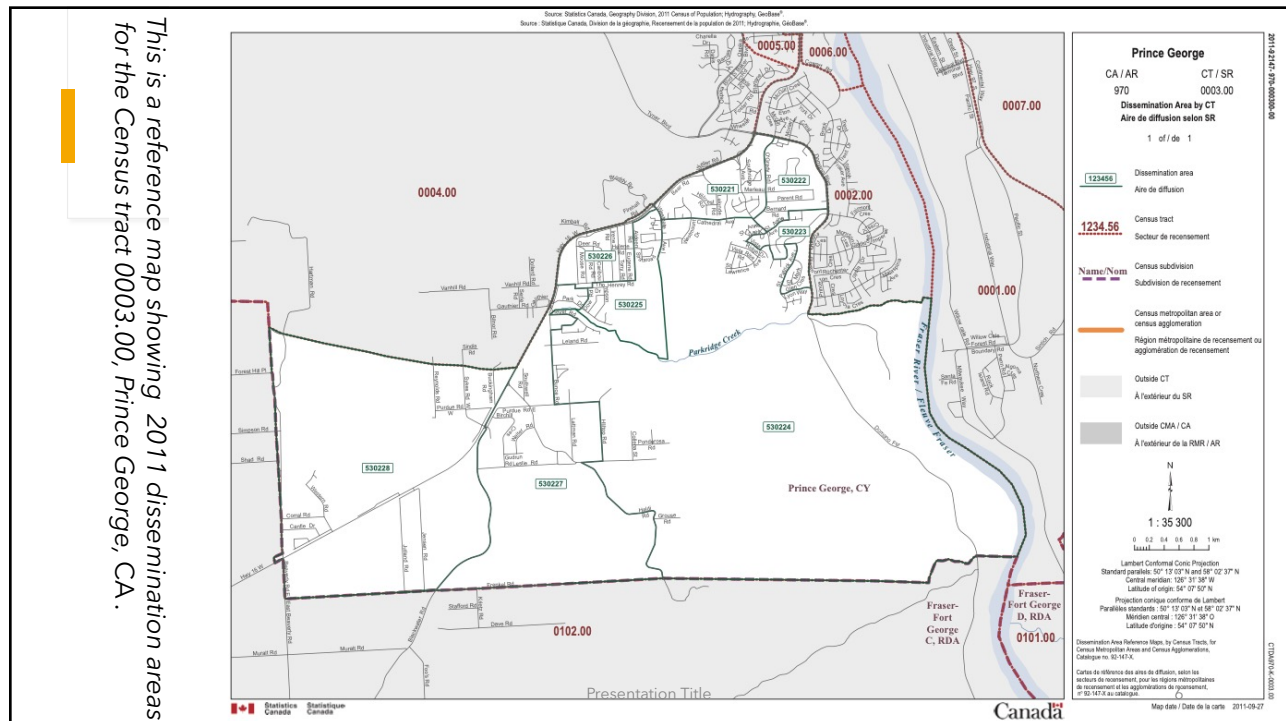
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Census Data

- Geographic Units
 - Dissemination Block
 - An area bounded on all sides by roads and/or boundaries of standard geographic areas. The dissemination block is the smallest geographic area for which **population and dwelling counts** are disseminated.
 - Dissemination Areas
 - composed of one or more adjacent dissemination blocks with an average population of 400 to 700 persons. It is the smallest standard geographic area for which **all census data** are disseminated.
 - Enumeration Areas: term used for the same geographic unit prior to 2001
 - Census Tracts
 - Larger areas that have a population between 2,500 and 8,000 persons.
 - They are located in centres of 50,000 or more in the previous census.

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Working with Census Data

- An important point is to determine the area units meaningful to your research
- Estimates for small areas
 - Higher risk of suppression due to confidentiality concerns
 - More sensitive to
 - rounding
 - non-responses
 - Leads to greater margin of error in small area estimates

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Pros & Cons of Census Small Areas

Unit	PROs	CONs
<i>Block Face</i>	<ul style="list-style-type: none"> ■ very high resolution ■ entire country covered 	<ul style="list-style-type: none"> ■ households and population counts only
<i>Enumeration Areas</i>	<ul style="list-style-type: none"> ■ fairly high resolution ■ all Census questions ■ entire country covered 	<ul style="list-style-type: none"> ■ inconsistent boundaries ■ higher risk of data suppression, influence of rounding
<i>Dissemination Areas</i>	<ul style="list-style-type: none"> ■ consistent boundaries ■ fairly high resolution ■ all Census questions ■ entire country covered 	<ul style="list-style-type: none"> ■ risk of data suppression ■ influence of rounding
<i>Census Tracts</i>	<ul style="list-style-type: none"> ■ consistent boundaries ■ all Census questions ■ lower risk of data suppression 	<ul style="list-style-type: none"> ■ lowest resolution ■ potential for boundaries to become "outdated" ■ only available for larger centres

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2011 Census Long Form Elimination

- “Long Form” Census form had been around a long time (the 8 question short form was introduced in 1971)
- Sections:
 - Demography; Labour markets & income; Transportation; Education; Language; Activity Limitations; Housing; Citizenship and immigration; Ethnicity/culture

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2011 Census Long Form Elimination

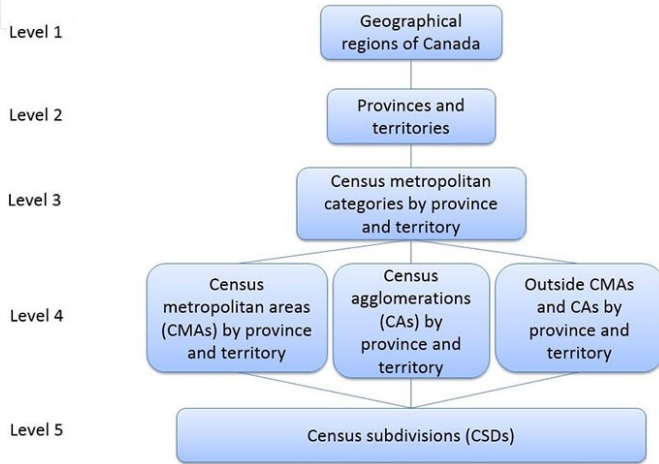
- Mandatory - fill it out or else fine or jail time!
- Up to 2006, sent to one in five households (20%) “random” sample
 - 2016 - now sent to one in four (25%) households
- 2010 - Federal government decided to cancel it
 - Replaced with a **voluntary** household survey (National Household Survey)
- Present government reinstated it in time for 2016 Census

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Hierarchy of standard geographic areas

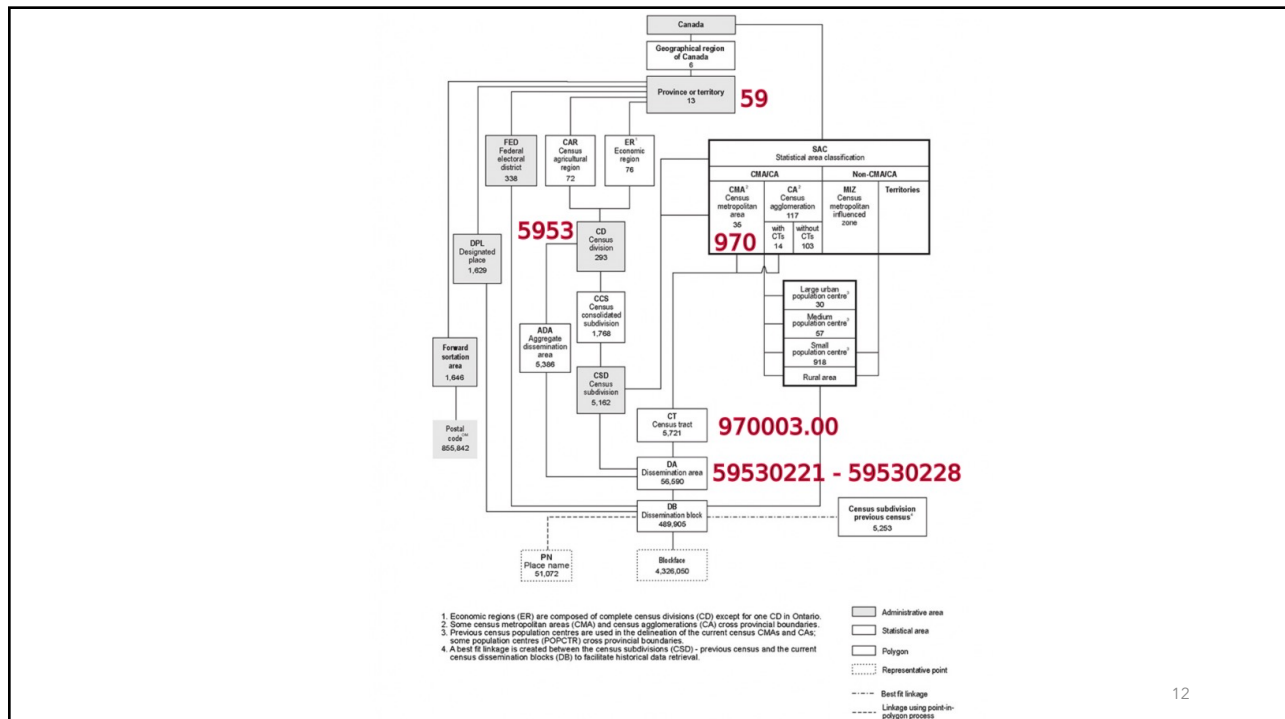


- A chart used to explain the types of geographic regions that are used for interpreting Statistics Canada data.

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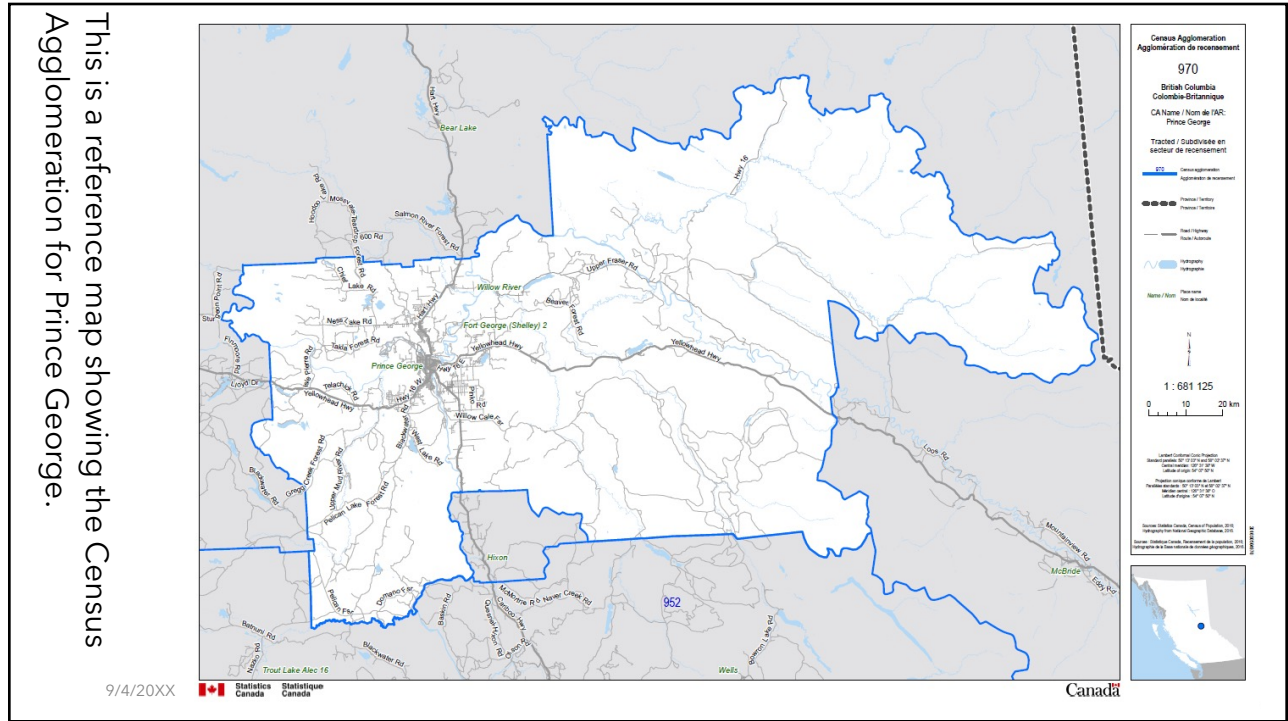
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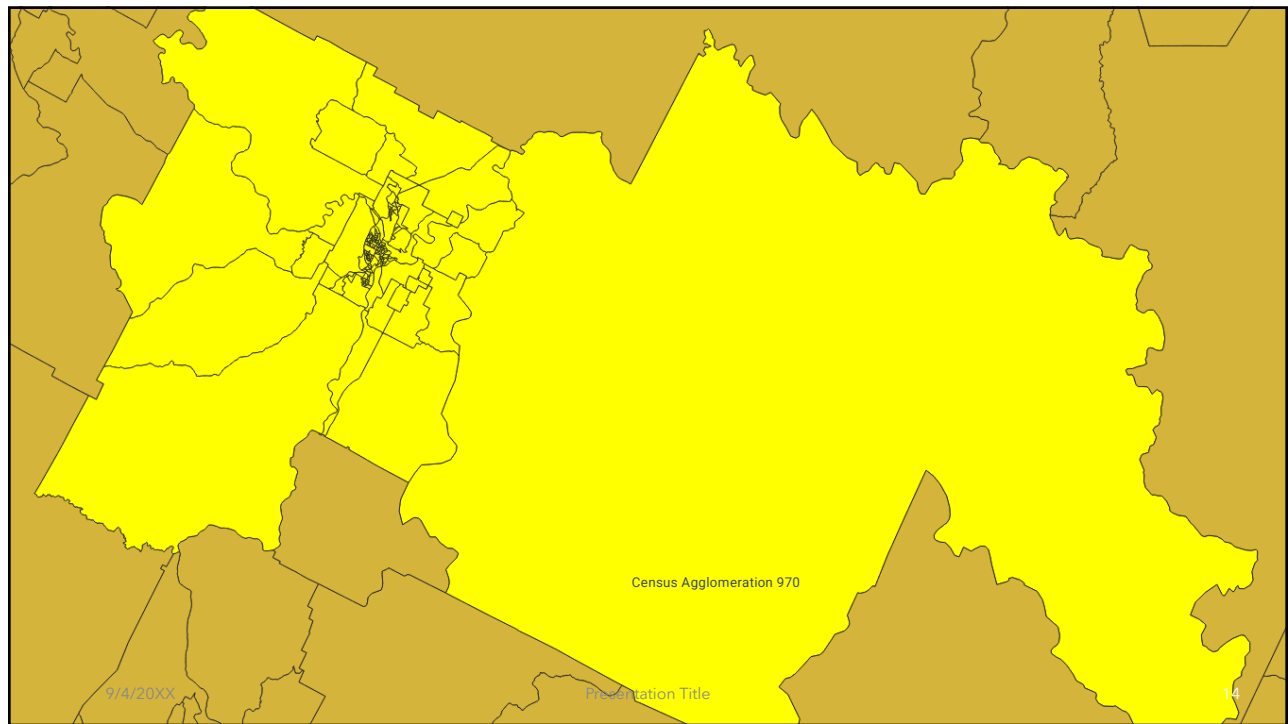
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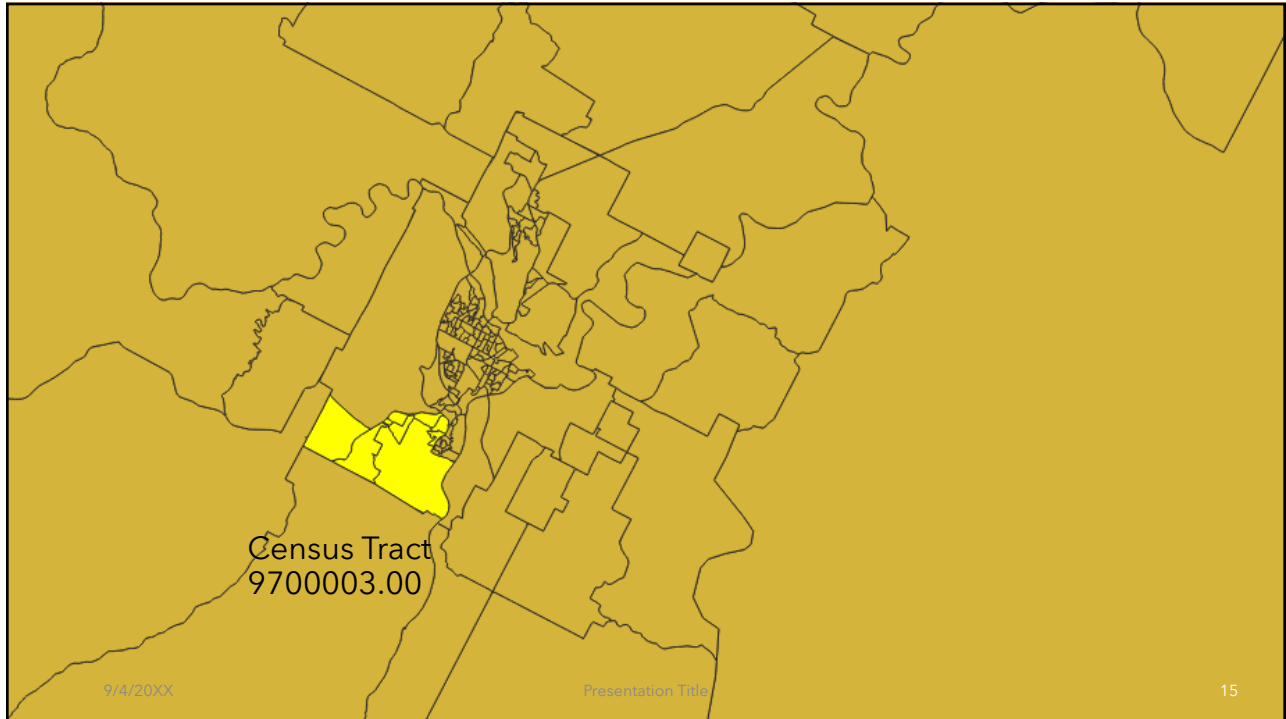
This is a reference map showing the Census Agglomeration for Prince George.



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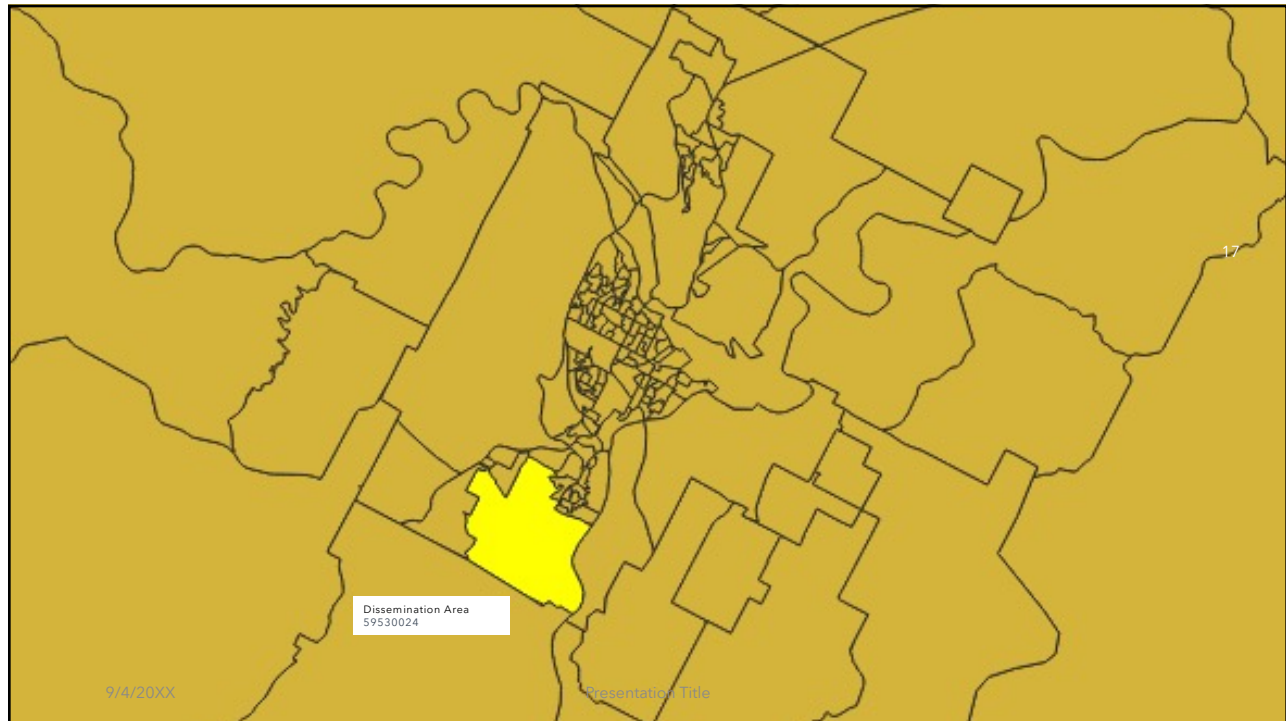


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59530101	59	5953	Fraser-Fort George	5953023	Prince George	5950	Cariboo	970	59970	Prince George	9700002	2	59530016
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Attributes associated with the Census Tract

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Data Products and Boundary Files

- Data Products
 - <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/index-eng.cfm>
- You can download census boundary files from the Statistics Canada website
 - <https://www.statcan.gc.ca/en/geography?MM=1>

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Census Data

- Working with census data usually implies joining tabular data with spatial data representing the statistical boundaries.
 - The tabular represents variables of interest
 - population, education, housing
 - Spatial data represents boundaries of the census geography
 - dissemination areas, census metropolitan areas

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Census Data

- After joining the census boundary data to the tabular data, the tabular data become the attributes of the spatial file.

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