The Canadian Statistical System

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Gustave Goldmann
The structure of government

- Federation
- 3 levels of government
  - National, provincial/territorial, municipal
  - With split responsibilities
Survey data are collected/produced at all levels of government

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<thead>
<tr>
<th></th>
<th>Federal</th>
<th>Provincial</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Census</td>
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<tr>
<td>Education</td>
<td>✓</td>
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<tr>
<td>Health</td>
<td>✓</td>
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<tr>
<td>Labour &amp; work</td>
<td>✓</td>
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<tr>
<td>Income, spending &amp; wealth</td>
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<tr>
<td>Population &amp; demography</td>
<td>✓</td>
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<tr>
<td>Business &amp; industry</td>
<td>✓</td>
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<td>Travel &amp; Tourism</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Economic activity</td>
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Administrative data are also produced by all levels of government

<table>
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<tr>
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<tr>
<td>Health</td>
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<tr>
<td>Education</td>
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<td>Justice</td>
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<td>Immigration</td>
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<tr>
<td>Employment</td>
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<tr>
<td>Taxation &amp; revenue</td>
<td>√</td>
<td></td>
<td></td>
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<tr>
<td>Social programs</td>
<td>√</td>
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</table>
The national statistical system is a centralised (?) partnership

- Centralised – federally and provincially
- Partner institutions
  - FNSI
  - CIHI
  - Granting councils – federal and provincial
  - Federal departments and agencies
  - Provincial departments and agencies
Governance and Coordination
National Statistics Council

External Advisory Committees

- Agriculture
- Culture
- Demography
- International Trade
- Justice
- Labour & Income

- National Accounts
- Price Measurement
- Science & Technology
- Service Sector
- Social Conditions
- Statistical Methods
Federal/Provincial/Territorial Committees serve as fora for consultation and coordination with some of the partners in the system

- Business Statistics
- Social Statistics
- Labour Statistics
- Demography
- Census
- Vital Statistics

- Mineral Statistics
- Public Sector Statistics
- Provincial Economic Accounts
- LHAD Initiative
- Dissemination
The Research Continuum

*secondary sources*
What is the RDC Network?

It is a partnership that includes:

- More than 40 Canadian universities
- Major Granting Councils (SSHRC, CIHR, CFI)
- Provincial governments
- Statistics Canada
What is a Research Data Centre?

- Secure environment in a setting that is removed from Statistics Canada premises
- Houses Statistics Canada micro data files
- Staffed by a Statistics Canada employee at all times
- Operates under the provisions of the Statistics Act
- Access limited to researchers with approved projects and "sworn-in" under Statistics Act as "deemed employees"
- All researchers have direct access to the data
Centres in first CFI application

Provincial funds leveraged by first CFI application
Funding Arrangements
General principle

Researchers from participating institutions do not pay for access to the RDC
Sources of funding for the Network

- Participating universities
- SSHRC-CIHR consortium
- CFI – infrastructure
- Provincial governments – Alberta, Manitoba, Québec
- Statistics Canada – direct funding and in kind contributions
Governance of the RDC Network
RDC NETWORK
Universities, Centres & Branches
15 Data Centres
6 Branches
26 Partners

Granting Councils
SSHRC, CIHR
CFI

RDC National Coordinating Committee (RDCNCC)

RDCNCC Chair

RDCNCC Office Assistant

Knowledge Transfer Officer

RDC Analysts in each Centre

Manager of RDC Network

Statistics Canada

RDC Publication Inventory

STC RDC HQ Operations
Role of Statistics Canada

- Provide and support the data
- Advise on methods and conduct research into analytical methods
- Administer the contracts and researcher activity in the RDCs
- Ensure the research results end up in the public domain
- Set and maintain the standards for security
Role of the RDC analysts

- Ensure a Statistics Canada presence in the RDCs
- Conduct disclosure avoidance analysis on all results leaving the RDC
- Provide support on the data in the RDCs, including loading the data sets
- Provide consultation and advice on methods and data
- Provide liaison with specialists in Statistics Canada head office – methods and data
- Actively participate in local research activities (within the participating institutions)
Data sources
A partial list of the datasets in the RDCs

Survey of Household Spending (SHS)
Survey of Labour and Income Dynamics (SLID)
Youth in Transition Survey (YITS)
National Longitudinal Survey of Children and Youth (NLSCY)
Workplace and Employee Survey (WES)
National Survey of Giving, Volunteering and Participation (NSGVP)
National Graduate Survey (NGS)
National Population Health Survey (NPHS)
Canadian Community Health Survey (CCHS)
A partial list of the datasets in the RDCs (cont’d)

Survey of Financial Security (SFS)
General Social Survey (GSS)
Longitudinal Survey of Immigrants to Canada (LSIC)
Ethnic Diversity Survey (EDS)
Program for International Student Achievement (PISA)
Survey of Approaches to Educational Planning (SAEP)
Participation and Activity Limitation Survey (PALS)
Aboriginal Peoples Survey (APS)
Food Expenditure Survey (FES)
Distribution of active projects by theme

[Bar chart showing distribution of projects by theme for various research data centers.]

- Health
- Socio-cultural
- Children & youth
- Labour & income
- GSS
- Other

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How to apply for access to the RDCs
Access to the Research Data Centres
(Academic researchers)

- Project proposal
- Proposal evaluation - SSHRC
- Security clearance - enhanced reliability check
- Orientation session and “oath of office”
- Researcher agrees to provide publicly available report that falls within Statistics Canada’s mandate
Evaluation Criteria – academic researchers

- Necessity for access to detailed micro data and to the particular dataset(s) specified in proposal
- Clearly defined project objectives
- Suitability of analytical and statistical methods
- Scientific merit of the project
- Do the applicant and the team members (if applicable) have the experience, qualifications, and expertise to successfully complete the proposed project?
Access to the Research Data Centres
(Federal/Provincial/Territorial researchers)

- Project proposal, “reviewed” by designated official (either DG research for federal departments, or statistical focal point for provinces and territories)
- The work is to be performed by an employee (or deemed employee) of the federal department or the provincial/territorial government
- Proposal evaluation - STC
- Security clearance - enhanced reliability check
- Orientation session and “oath of office”
Evaluation Criteria – federal, provincial, territorial researchers

- The work is statistical in nature.
- The work requires access to the specified data file(s), and cannot be accomplished using publicly available data files or published statistical information.
- The work can be completed using the specified data file(s).
- The work **can not** be quickly and efficiently completed by Statistics Canada employees.
- No data sharing agreement exists within the requesting department with respect to the dataset for which access is required.
Challenges and the future
1. Add to the corps of quantitative social science researchers

**Response**
- Programs such as the RDC network and DLI
- Programs initiated by the major granting councils
- Greater participation of international researchers in research teams
- Access to Canadian data for foreign students in Canada

**Challenges**
- Facilitate international collaboration
- Enlist the help of professional organizations (e.g. APPAM, CPS, PAA, ASA CEA, AEA) to promote greater international collaboration
2. Open access to Canadian data to the international community of social scientists

**Response**
- Foreign researchers currently have access to Canadian in the RDCs and in Statistics Canada head office.
- Canada participates in a number of international programs that help to promote international comparative research (e.g. Labour market analysis programs sponsored by OECD and ILO, literacy programs sponsored by OECD, health programs sponsored by the U.S. and IHO).

**Challenges**
- Make Canadian data available to international researchers working outside Canada.
- Ensure compatibility and comparability of concepts.
- Create suitable data documentation.
- Create longitudinal data that follow subjects regardless of national boundaries.
3. Open access to international data to Canadian social scientists

**Response**
- Currently occurs where the data are available in some form of public access (either open or restricted)

**Challenges**
- Create opportunities for Canadian social scientists to work with international data in conjunction with Canadian data
- Provide a suitable venue for the publication/presentation of the results
Major initiatives for the future

- Add administrative data linked to survey data
- Link all the RDCs by a secure network
- Fully document the data holdings using DDI compliant technology
- Explore other avenues of access to micro data
To learn more …

http://www.statcan.ca/francais/rdc/

http://www.statcan.ca/english/rdc/

rdc-cdr@statcan.ca