Following Statistics Canada's appearance at the Senate Standing Committee on Banking, Trade and Commerce (BANC) on Thursday, November 8, 2018, Senator Deacon requested that Statistics Canada provide information on the Agency's privacy framework.

Statistics Canada Privacy Framework

As stated in the "About Us" section of our Website, we at Statistics Canada are committed to protecting the privacy and confidentiality of all information entrusted to us and to ensuring that the statistics and analysis we deliver is timely and relevant to Canadians.

How this is achieved is explained and demonstrated throughout our website and is outlined in various Statistics Canada internal policies and directives. Statistics Canada also adheres to the security and privacy provisions of pertinent legislation and complies with security related government-wide directives and policies.

The following non-exhaustive list linking to various publically available references and documents will allow the Committee on Banking, Trade and Commerce to appreciate the extent of the mechanisms, measures and controls in place at Statistics Canada for protecting confidentiality and respecting privacy. Also listed below are some of the strong internal directives for the protection of privacy that the Agency has developed, such as the Directive on the Security of Sensitive Statistical Information and the Policy on Privacy and Confidentiality.

As an added measure to protect the confidentiality of information under Statistics Canada's care, it's important to mention that the *Statistics Act* requires that all Statistics Canada employees and deemed employees swear a life-time oath of secrecy, and they are subject to penalties should they be found guilty of an offence under the Act. Employees are also required to take periodic confidentiality and security courses to remind them of their obligations, and Statistics Canada regularly holds privacy and security sensitization campaigns which foster a strong culture of respect for the need for privacy and confidentiality.

It is the strong legal protection, sound practices and processes alone with a supportive culture that have allowed Statistics Canada to fulfill its mandate and earn the trust of Canadians for a hundred years.

Legislation

- *Statistics Act*
- *Privacy Act*
- *Personal Information Protection and Electronic Documents Act*

Statistics Canada Website

- Privacy notice
- Privacy Framework
- Privacy and confidentiality of personal information
- Privacy impact assessments
- Microdata linkage at Statistics Canada
- Protecting your privacy as a client
- Accountability under the *Statistics Act*

- How is my privacy and personal information protected? (FAQ section under Information for survey participants)
- Information about Programs and Information Holdings
- Social Data Linkage Environment

Statistics Canada Policies, Guidelines and Directives

- Statistics Canada Policy on the Use of Administrative Data Obtained under the *Statistics Act*
- Directive on Conducting Privacy Impact Assessments

Available on request

- Directive on Access to Information and Privacy
- Directive on Conducting Privacy Impact Assessments
- Directive on Data Sharing
- Directive on Discretionary Disclosure
- Directive on Informing Survey Respondents
- Directive on the Security of Sensitive Statistical Information (attached)
- IT Security Policy
- Policy on Microdata Access
- Directive on Microdata Linkage
- Directive on Obtaining Administrative Data under the Statistics Act
- Policy on Privacy and Confidentiality (attached)

Government of Canada Policies and Directives

- Directive on Privacy Practices
- Guidelines for Privacy Breaches
- Policy on Government Security

Other

- Compendium of Management Practices for Statistical Organizations from Statistics Canada's International Statistical Fellowship Program: Chapter 4.6 Respecting privacy and protecting confidentiality

Statistics Canada's Microdata Access Application Process

Statistics Canada's commitment to maintaining the confidentiality of the information obtained from the Canadian public is enshrined in the *Statistics Act*[1] and the Agency's various policies and practices related to data collection, analysis and dissemination activities as well as the *Privacy Act*.[2]

The Research Data Centre (RDC) Program is an important pillar in the Agency's broad data access strategy. The RDCs are part of an initiative by Statistics Canada, the Social Sciences and Humanities Research Council (SSHRC), Canadian Institutes for Health Research, and university consortia to help strengthen Canada's social research capacity and to support evidence-based policy development. The program provides access to anonymized data to conduct approved research projects.

Everyone accessing Statistics Canada's anonymized microdata in an RDC is a deemed employee of the Agency under Section 5 of the *Statistics Act*. Deemed employees are individuals who have gone through a full security assessment and have met the same requirements as paid employees.

Specifically, researchers must follow these steps to complete the application process to access to detailed confidential data:

1. **Submit a proposal to access Statistics Canada's confidential data**

- Researchers submit a proposal outlining their request to access data which includes: their research question, a list of the specific data files to be accessed and a description of their analytical plan.

2. **Proposal is evaluated before researcher receives approval to access Statistics Canada data**

Each proposal is subject to a peer review which evaluates the following:

- scientific merit and viability of the proposed research;
- relevance of the methods to be applied and the data to be analyzed;
- expertise and ability of the researcher to carry out the proposed research as illustrated in the CVs and list of contributions.

Each proposal is also reviewed by Statistics Canada where the following is evaluated:

- clear demonstration of the need for access to detailed data as indicated by key variables contained in the dataset; and,
- assurance that the data requested can in fact answer the research question.

3. **Be granted security status from Departmental Security**

Security status to the 'Reliability' level is mandatory for all deemed employees who request access to protected information.

Researchers must complete a security clearance request, provide fingerprints, and consent to a criminal background and credit check. These requirements are outlined in the Treasury Board Standard on Security Screening and follow the same rules as those applied for federal government employees.

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[1] https://laws-lois.justice.gc.ca/eng/acts/S-19/FullText.html
[2] https://laws-lois.justice.gc.ca/eng/acts/P-21/

4. **Sign the oath/affirmation of secrecy required by the *Statistics Act***

   The oath/affirmation of secrecy pursuant to subsection 6(1) of the *Statistics Act* must be administered to deemed employees before permitting access to protected information. Deemed employees swear that they will **never** disclose any identifiable information about individual respondents at any time during their lifetime.

   In the event that someone breaks the oath, the individual would be subject to the penalties outlined in the *Statistics Act* (fines and/or imprisonment).

5. **Complete mandatory training**

   Prior to being granted access to anonymized microdata, all deemed employees must complete training on the security protocols applicable for data access. The training outlines their responsibilities as a deemed employee while working with confidential data. The are also provided with a Researcher Guide.

6. **Acknowledge the Values and Ethics Code for the Public Sector**

   Each deemed employee must acknowledge in writing having received and read the Values and Ethics, the Code for the Public Sector, and the Policy on Conflict of Interest and Post-Employment required by Treasury Board for all federal employees and deemed employees.

7. **Sign a Microdata Research Contract**

   A researcher must sign a contract with Statistics Canada which outlines the project to be completed and the researcher's responsibilities according to the Statistics Act.

Upon the successful completion of these steps, access to confidential data is granted until the end date of the MRC.

Statistics Canada's microdata access security strategy

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Everyone accessing Statistics Canada's detailed microdata is either a paid employee or a deemed employee of the Agency. Deemed employees are individuals who have gone through a full security assessment and have met the same requirements as paid employees.

Statistics Canada takes a holistic approach to the protection of data when it is accessed by researchers in the RDC Program. To do so, Statistics Canada has implemented the *5 Safes Framework*[3] developed by the United Kingdom Office for National Statistics. This framework has also been adopted by several other countries with data access programs, including Australia, New Zealand, Mexico, the Netherlands, and some agencies in the United States.

The 5 Safes Framework as applied to the Statistics Canada RDC program is as follows:

Safe People. The personal legal responsibility of each researcher is established by the terms and conditions of a Microdata Research Contract (MRC) that must be signed by all researchers before receiving access. All researchers accessing microdata in a RDC must become a deemed employee of Statistics Canada. A deemed employee must swear or affirm the *Oath of Office and Secrecy* to Statistics Canada that obligates them to protect the data as required by the *Statistics Act*. Individuals must obtain *Reliability* Security Clearance according to the specifications in the Treasury Board *Standard on Security Screening*,[4] which includes a criminal record check, fingerprints and a credit check. Deemed employees working in the RDC must also affirm that they are not in a position of conflict of interest for the use of microdata.

Safe Projects. In order to access detailed microdata in an RDC, researchers must submit a detailed project proposal for approval. Project proposals undergo an institutional review by Statistics Canada to ensure the feasibility of the project, and a peer review to demonstrate the research value of the proposed work. Each deemed employee signs a contract which sets out the terms and conditions of data access for their project, once approved. The contract also stipulates the start and end date of the access

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[1] https://laws-lois.justice.gc.ca/eng/acts/S-19/FullText.html
[2] https://laws-lois.justice.gc.ca/eng/acts/P-21/
[3] *Desai, Tanvi; Ritchie, Felix; Welpton, Richard (2016). "Five Safes: designing data access for research" (PDF). Bristol Business School Working Papers in Economics (*https://www2.uwe.ac.uk/faculties/BBS/Documents/1601.pdf)
[4] https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=28115

to data, and the defined research purpose for which access is given and restricted to only those datasets that are required to complete the project. New researchers receive training on protocols and are required to read Values and Ethics and Code of Conduct documents.

Safe Settings. Safe settings are both the physical space in which deemed employees access data as well as the technological protection of the data. ***Physical protection***: Researchers access data in physically secure rooms. Various protocols are followed to secure the data in the RDCs, including protected entry and monitoring and restriction of activities such as visitor access, printing and shredding of documents. Statistics Canada employees are trained to maintain and actively monitor the physical protection controls in the RDCs. ***Technological protection*** is applied in all RDCs and meets the Treasury Board *Operational Security Standard: Management of Information Technology Security (MITS)*[5] (e.g., encryption, firewalls, etc.). Statistics Canada employees authorize and manage researcher network accounts to ensure they only have access to files approved in their microdata research agreement. All research facilities are inspected for physical and technological protection on a regular basis in accordance with government security standards.

Safe Data. Safeguarding the confidentiality of information is a legal requirement, as set out in section 17(1) of the *Statistics Act*. Each and every microdata file is first assessed for disclosure risk before it is made available to researchers in an RDC. Only data that have been de-identified (stripped of all names and addresses to protect respondent confidentiality) are eligible for access by researchers in an RDC. No individual records ever leave the RDCs.

Safe Output. Only aggregated data or modeled statistics are permitted to be removed from RDCs and require approval before being removed. Statistics Canada analysts review all information researchers request for removal from the RDCs for potential confidentiality risk based on established rules and procedures. All information including statistical results and all notes or documents must pass the confidentiality vetting process to ensure any potential risk to confidentiality is mitigated before the data leave the RDC.

The five elements complement each other and in combination create an integrated, comprehensive approach to confidentiality and security within each RDC.

[5] This is a standard pursuant to the Government Security Policy (https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=12328&section=html)