

Canada's Performance Report 2005

Annex 2

Indicator Methodology

Table of Contents

1.	Sustainable Economy	1
2.	Canada's Social Foundations	12
3.	Canada's Place in the World	17
4.	Aboriginal Peoples	20

1. Sustainable Economy

Real gross domestic product per capita

Measure: Real gross domestic product (GDP) per capita is the inflation-adjusted value of all products and services produced in Canada per person in a given year. To measure this concept, GDP expenditure-based components are adjusted to eliminate the effect of price change.

Note: The survey population is the Canadian economy (persons and unincorporated businesses, corporations, governments, and non-residents). Data were collected by other surveys. The GDP measures only the production originating within the geographic boundaries of Canada, whether Canadians or non-residents own the factors of production. Real GDP is related directly to other key macroeconomic variables, such as employment, business cycles, productivity, and long-term economic growth.

When real GDP is growing near its long-term potential growth rate, the economy is growing as strongly as possible without sparking inflationary pressures. A growth rate below potential means that the economy's stock of plants and equipment is not being used to the fullest, and unemployment tends to rise.

Data limitations: Data do not take into consideration activities that occur outside the market, such as the value of natural capital services or work done within the home or by volunteers.

Data source: Statistics Canada, *Canadian economic accounts quarterly review*, May 31, 2005

Cost-competitiveness

Measure: Cost-competitiveness is measured by comparing the after-tax cost of the start-up and operation of a business over a 10-year period. The combined results for a group of comparable cities in each country were compared to the baseline results of the U.S. A total of 27 cost components were analyzed, including labour, transportation, and taxes. In each country, a total of 17 industries were surveyed over a period of 8 months and 2,000 individual business scenarios were examined. The benchmark cost index (U.S. = 100.0) is defined as the average of 9 representative U.S. cities. The cost indices of the other countries were compared to the U.S. cost index, providing a percentage of cost advantage.

Note: The results of this study are sensitive to exchange rates. In all countries, the selected cities represent a mix in terms of population and geography and cities at different stages of the economic cycle (restructuring, emerging, and mature). This report was previously published in 2002.

Data source: KPMG, *The CEO's Guide to International Business Costs*, 2004 Edition (<http://www.competitivealternatives.com>)

Natural resources sustainability

Measure: The status of commercial fish stocks is based, when possible, on the current status of the mature portion of the stock relative to its historic status.

Notes: Natural resources sustainability is defined as the management and use of natural resources to satisfy the needs of present generations without compromising the ability of future generations to meet their own needs and improve their quality of life.

A healthy designation is indicative of a biologically sustainable stock, whereas a declining or depleted designation is an indication of concern with regard to the current or future sustainability of the stock within the context of the commercial fishery. Variables affecting the status of these commercial fish stocks include both natural and anthropogenic factors.

For many types of species, mature biomass is difficult to estimate and different indicators or trends in stock status are used.

Data limitations: Canadian commercial fish stocks do not always correspond to a balanced representation of all Canadian fish stocks due to the difference in assessment schedule. Species assessed vary every year, and assessments exclude aquaculture production.

Status of commercial fish stocks is only one component of natural resources sustainability and therefore may not accurately reflect the status of all of Canada's natural capital.

Data source: Canadian Science Advisory Secretariat, Fisheries and Oceans Canada, 2004

Climate change

Measures: Climate change is measured by

1. greenhouse gas emissions—megatons of CO₂ equivalent; and
2. energy efficiency improvements in secondary energy use.

Notes: Climate change is the change in climate over a time period that ranges from decades to centuries. The term refers to both natural and human-induced changes. The term *climate variability* refers to fluctuations in climate, including both shorter term (years to decades) fluctuations such as those caused by southern oscillation, such as El Niño, and longer term fluctuations, such as those caused by changes in the earth's orbit around the sun.

Meaningful comparisons of energy efficiency between countries can be difficult because very detailed energy, equipment stock, production, or weather data for each target country are required.

Data sources: Environment Canada, Greenhouse Gas Division, 2005; International Energy Agency (IAE), *Oil Crises and Climate Challenges: 30 Years of Energy Use in IEA Countries*, 2004; Natural Resources Canada, Office of Energy Efficiency, *Energy Efficiency Trends in Canada, 1990 to 2003*

Green economic practices

Measures: Green economic practices are measured using firms registered with environmental management system ISO 14001:

1. total number of certificates;
2. relative to GDP—number of certificates per million U.S. dollars; and
3. relative to population—number of certificates per 1,000 inhabitants.

Note: Environmental Management System ISO 14001 “is an internationally accepted specification for an EMS. It specifies requirements for establishing an environmental policy, determining environmental aspects and impacts of products/activities/services, planning environmental objectives and measurable targets, implementation and operation of programs to meet objectives & targets, checking and corrective action, and management review.” (International Network for Environmental Management)

Data limitations: Unknown sources for GDP and population.

Data source: International Network for Environmental Management, December 2003 (data collected by Reinhard Peglau of the Federal Environmental Agency, Berlin, Germany, <http://www.inem.org/iso/speedo.htm>)

Innovation

Measures: Measures of innovation activities include the following:

1. gross domestic expenditure on research and development (GERD);
2. shares in triadic patent families; and
3. number of science and engineering articles published.

Notes: *Innovation* refers to conceiving of new ideas about how to do things better or faster or creating a product or service that has not previously been developed or thought of. Innovations can be world firsts, new to Canada, or simply new to the organization that applies them.

GERD is calculated by adding up the intramural expenditures of the four performing sectors: business enterprise, government, private non-profit, and higher education. (Organisation for Economic Co-operation and Development (OECD), *Frascati Manual 2002: Proposed Standard Practice for Surveys on Research and Experimental Development*)

Data limitations: GERD as a ratio of GDP is influenced by the economic structure and the propensity to perform research and development in particular sectors. Both change from country to country. (OECD, *Factbook 2005: Economic, Environmental and Social Statistics*)

Publication counts: Solely using publication counts or publication counts without sufficient context can result in an incomplete or inaccurate picture. For example, differences in publication rates between scientific disciplines may be a consequence of differences in propensity to publish, in the definition of the smallest publishable unit, or in patterns of collaboration rather than differences in productivity. (National Science Foundation, U.S., and National Science and Technology Council, Peru, 1996)

Comparisons between the U.S. and Canada on innovation performance

The U.S. technological balance of payments data cover only royalties and license fees, which are internationally more comparable. Other transactions, notably “other private services” have been excluded.

Canada does measure payments and receipts for research and development services. (OECD, *Main Science and Technology Indicators*, Volume 2004, Issue 2)

Data sources: National Science Foundation, *Science and Engineering Indicators 2004*, Volume 2, <http://www.nsf.gov/statistics>; OECD, *Main Science and Technology Indicators*, Volume 2004, Issue 2; Statistics Canada, *Innovation Analysis Bulletin*, Volume 7, No. 2 (June 2005)

Educational attainment

Measures: Educational attainment measures an individual’s highest level of completed schooling and is sometimes used as a proxy measure of human capital. OECD has defined human capital as the knowledge, skills, competencies, and attributes embodied in individuals that facilitate the creation of personal, social, and economic well-being. Levels of education derived from the census and the *Labour Force Survey* are as follows:

-
- ▶ Less than high school: persons who did not graduate from high school;
 - ▶ High school: high school graduates with no further education or with some post-secondary education but with no degree, certificate, or diploma;
 - ▶ Trade vocational: persons with a trade certificate or diploma from vocational or apprenticeship training;
 - ▶ College: persons with a non-university certificate or diploma from a community college, CEGEP, or school of nursing; and
 - ▶ University: persons with a bachelor's degree, university degree, certificate above a bachelor's degree, or a certificate below a bachelor's degree.

(Council of Ministers of Education and Statistics Canada, *Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program*, 2003)

Note: The order of these categories reflects education pathways that require increasing time commitments to schooling. Each person is classified according to the highest level completed. In the census, education information is gathered for members of the population aged 15 and over. Most young people aged 15 to 24 are still in school, so their current level of education understates the skills they will ultimately bring to the labour market. The discussion on levels of education is therefore primarily about the population aged 25 to 64. From a life-cycle perspective, the age group from 25 to 64 roughly covers people who are old enough to have completed their formal education but young enough to work.

Data limitations: There is a time lag in the publication of data; i.e. the 2004 report provides figures from 2002.

Data sources: OECD, *Education at a Glance 2004*; Statistics Canada, 2001 Census

Literacy

Measures: Canada's Performance uses three of the four skill assessment domains in the *Learning a Living: First Results of the Adult Literacy and Life Skills Survey (ALL)*:

1. Prose: The knowledge and skills needed to understand and use information from texts, including editorials, news stories, brochures, and instruction manuals.
2. Document: The knowledge and skills required to locate and use information contained in various formats, including job applications, payroll forms, transportation schedules, maps, tables, and charts.

3. Quantitative (numeracy): The knowledge and skills required to effectively manage the mathematical demands of diverse situations.

Proficiency is rated on a scale from 0 to 500. An individual's score reflects the point at which they have an 80-per-cent chance of successfully completing tasks associated with a similar level of difficulty. There are five levels of difficulty for the above three domains, each corresponding to a range of skills. For a description of each level, consult the ALL, Table I.1 (p. 17)

Note: Literacy is more than simply being able to read and write. It is the ability to read and understand written materials, including reports, documents, and mathematical charts and displays; use that information to solve problems, evaluate circumstances and make decisions; and communicate that information orally and in writing.

Data limitations: Prose and document literacy are defined and measured in the same way as in the International Adult Literacy Survey (1994). Numeracy is a new domain.

The survey uses cross-sectional data, not longitudinal, and caution must therefore be taken when interpreting change over time.

Data sources: Statistics Canada and the OECD, *Learning a Living: First Results of the Adult Literacy and Life Skills Survey*, 2005

Employment and unemployment

Measure: Employment rate is measured by the percentage of the population 15 years of age and over who have jobs. Unemployment rate by province is measured by the percentage of the labour force that actively seeks work but is unable to find work at a given time.

Notes: The employment rate denominator is the source population, not the labour force. The source population includes all working-age people not in the military or institutions, but the labour force includes only those persons who either have a job or are looking for one. While the source population grows fairly steadily from one year to the next, the labour force tends to fluctuate as persons become encouraged or discouraged by prevailing economic conditions.

The unemployment rate for a particular group (age, sex, etc.) is the number unemployed in that group expressed as a percentage of the labour force for that group. Discouraged workers—persons who are not seeking work because they believe the prospects of finding it are extremely poor—are not counted as unemployed or as part of the labour force. The number of persons unemployed is not the same as the number of people receiving employment insurance (formerly unemployment insurance) benefits since not all unemployed people are eligible for those benefits

and some people receiving benefits for things like maternity leave and fishing benefits may not be considered unemployed.

Data were adjusted to U.S. concepts for comparative purposes and, as a result, deviate from Statistics Canada's estimates of employment. The key adjustment of Canadian employment data is the removal of 15 year olds from the target population.

Data limitations: The *Labour Force Survey* is a sample survey and therefore subject to sampling error.

Data sources: Statistics Canada, *Labour Force Survey*, April 2005 (for detailed information on definitions, data sources, and methodology, consult survey number 3701); U.S. Bureau of Labor Statistics, 2005 (for detailed information on survey methodology, consult Chapter One of the *BLS Handbook of Methods*, 2003)

Income security

Measures:

1. Real disposable income (RDI) per capita is the amount of income available to an individual for the purchase of goods and services and for personal savings after taking into consideration taxes, transfers, and inflation. Changes in RDI over time could be considered to be an indication of the evolution in a country's standard of living.
2. Low income cutoffs (LICO) is the income level (after tax and income transfers from governments) at which an individual or family has to use substantially more of its income than the average Canadian individual or family for food, shelter, and clothing. LICOs vary according to family size and community size.

Note: Revenue estimates (such as RDI) are not deflated in the official national accounts estimates. In this case, the implicit price index for personal expenditure on goods and services was used to calculate RDI.

Data sources: Department of Finance Canada, *The Economy in Brief*, March 2005; Statistics Canada, *Canadian economic accounts quarterly review*, May 31, 2005; Ibid, Income Research Paper Series, *Low income cut-offs for 2004 and low income measures for 2002*; Ibid, *The Daily*, "Family Income," May 12, 2005

Barriers to entrepreneurship

Measures:

1. Administrative burden on start-ups
2. Regulatory and administrative opacity
3. Barriers to competition

Note: “The *OECD International Regulation Database* contains all the regulatory information used to construct the PMR indicators. As in 1998, answers to a detailed questionnaire on regulatory practices in OECD countries are the principal source of these data. The 2003 version of the questionnaire contains six sections spanning important aspects of general and sectoral regulatory policies as well as some aspects of industry structure (Table 1). Each section was answered by civil servants in national administrations that have knowledge and/or responsibilities related to the relevant policy areas. Within each country the respondents were usually coordinated by a single contact person. In total, the 2003 questionnaire collected 805 data points for each OECD country. It was distributed in October 2003 and responses from most countries were received by mid-February 2004. Therefore, most of the data reflect regulations in place at the end of 2003.” (Conway, P., V. Janod, and G. Nicoletti, *Product Market Regulation in OECD Countries, 1998 to 2003*, “OECD Economics Department Working Paper,” No. 419, page 5, 2005)

Data limitations: According to Conway and Nicoletti (2005), the following describes a limitation with the Product Market Regulation (PMR) indicator system: The PMR indicators are based primarily on explicit policy settings and only account for formal government regulation. Thus, the indicators only record *objective* data about rules and regulations, as opposed to *subjective* assessments of market participants in indicators based on opinion surveys. This isolates the indicators from context-specific assessments and makes them comparable across countries, but also implies some limitations. *Informal* regulatory practices, such as administrative guidance or self-disciplinary measures of professional associations, are only captured to a very limited extent in the PMR indicators system. Similarly, the way in which regulations are applied by enforcement authorities, which can have a considerable impact on competition in a given market, is also only reflected in a relatively minor way in the PMR indicators system.

Data sources: Conway, P., V. Janod, and G. Nicoletti, *Product Market Regulation in OECD Countries, 1998 to 2003*, “OECD Economics Department Working Paper,” No. 419, 2005

Air quality

Measures:

1. Average concentrations of air pollutants in Canada; and
2. Trends in peak levels of ground-level ozone in Canada by region.

Pollutant	Detection Principle	Units of Measurement	Minimum Reported Concentration	Type of Monitoring
Nitrogen Oxides (NO _x)	Chemiluminescence	Parts per billion by volume (ppb)	1 ppb	Continuous (1-hour means)
Volatile Organic Compounds (VOC)	Gas chromatography/ Mass spectrometry	Micrograms per cubic metre (µg/m ³)	0.05 µg/m ³	Manual (24-hour sample)
Ozone	Ultraviolet photometry or chemiluminescence	Parts per billion by volume (ppb)	1 ppb	Continuous (1-hour means)
Sulphur dioxide (SO ₂)	Ultraviolet fluorescence	Parts per billion by volume (ppb)	1 ppb	Continuous (1-hour means)
Fine particulate matter (PM _{2.5})	Inertial Mass, Beta attenuation, Gravimetry	Micrograms per cubic metre (µg/m ³)	1 µg/m ³	Manual (24-hour sample)

Notes: Scientists collect and analyze samples of air in different regions of Canada on a regular basis to determine pollutant levels. This information is not only used by decision makers to pinpoint the sources of air pollution and determine strategies for reducing it but also by meteorologists to produce daily air-quality forecasts that warn Canadians when smog levels are high.

For descriptions and explanations of detection principles, please consult the *Environmental Protection Series, Annual Data Summary for 2003*, which is produced by Environment Canada's National Air Pollution Surveillance (NAPS) Network.

Annual average volatile organic compounds and nitrogen dioxide are based on urban sites. Ground-level ozone average is based on urban and rural sites. Average ozone is based on daily 8-hour maximum measurements for the ozone season (April 1 to September 30).

Three-year running averages are based on annual 4th highest 8-hour measurements. Some regions are represented by a small number of stations. Achievement of the Canada-wide Standards is for individual stations and follows specific requirements set out by the Canadian Council of Ministers of the Environment.

Annual average PM_{2.5} and sulphur dioxide are for urban sites. PM_{2.5} measurements are for 24-hour periods made every 6 days for a small number of sites (10 to 15).

Data source: Environment Canada, National Air Pollution Surveillance Network, *Environmental Protection Series, Annual Data Summary for 2003*

Water

Measure: Water use

Notes: The difference between water use and water consumption should be noted. *Water use* refers to water removed from the environment, some portion of which may be returned to water bodies (e.g. flushing a toilet). *Water consumption* refers to water that is removed from the environment but not returned—it is evaporated, transpired, or incorporated in plants and animals (e.g. watering the lawn). When water is consumed it is no longer available for other uses.

Data source: Environment Canada, *2004 Municipal Water Use Report*

Biodiversity

Measure: The status of biodiversity is measured only partially using the change in status of reassessed species at risk.

Notes: Under the *Species at Risk Act*, which came into effect in June 2004, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) was established as the independent body of scientific experts responsible for advising the Government of Canada on the status of species at risk. It comprises members from the federal, provincial, and territorial governments, as well as non-government representatives.

Biodiversity refers to the great variety of species and ecosystems and the ecological processes of which they are a part. It includes all living organisms, both wild and domesticated, as well as the ecosystems in which they live.

The following are status definitions as determined by COSEWIC:

- ▶ extinct (X)—a wildlife species that no longer exists;
- ▶ extirpated (XT)—a wildlife species no longer existing in the wild in Canada but occurring elsewhere;
- ▶ endangered (E)—a wildlife species facing imminent extirpation or extinction;
- ▶ threatened (T)—a wildlife species likely to become endangered if limiting factors are not reversed;
- ▶ special concern (SC)—a wildlife species that may become a threatened or endangered species because of a combination of biological characteristics and identified threats; and
- ▶ not at risk (NAR)—a species that has been evaluated and found to be not at risk of extinction given the current circumstances.

The analysis includes species reassessed by COSEWIC for which the reassessment was based on an updated status report. Reassessments based on the re-evaluation of the initial assessment reports under the quantitative criteria (used by COSEWIC since 1999) were not included.

In some cases, a species placed in a lower risk category may be the result of new information rather than an actual improvement or deterioration in its status.

Species that underwent change in their designatable units upon re-evaluation and were reassessed as unique entities were not included (*designatable unit* refers to a subspecies, variety, or geographically or genetically distinct population that may be recognized by COSEWIC where a single status designation for a species is not sufficient to accurately portray probabilities of extinction within the species).

Data limitations: Only a fraction of Canada's species has been assessed and an even smaller number reassessed. There are more than 70,000 known species in Canada. The status of 687 species has been assessed and the status of 147 of these has been reassessed.

Data source: COSEWIC, 2005, http://www.cosewic.gc.ca/eng/sct5/index_e.cfm

2. Canada's Social Foundations

Life expectancy

Measure: Life expectancy is the number of years a person would be expected to live on the basis of the mortality statistics for a given observation period.

Note: Although life expectancy is a measure of longevity and not quality of life, it is widely used as an indicator of the health status of the population.

Data sources: OECD, *Health Data 2005: Statistics and Indicators for 30 Countries* (for international comparison); Statistics Canada, Canadian Vital Statistics, Birth and Death Databases (for Canada)

Self-rated health

Measure: Self-rated health is measured by population members (aged 12 and over) who rate their own health status as being excellent, very good, good, fair, or poor.

Note: Self-rated health is a widely accepted indicator of potential health problems or the existence of more objectively measured health problems.

Data sources: OECD, *Health Data 2005: Statistics and Indicators for 30 Countries* (for international comparison); Statistics Canada, *Canadian Community Health Survey, 2003*; Ibid, *National Population Health Survey, 2003* (for Canada)

Infant mortality

Measure: Infant mortality is the number of deaths of children under one year of age expressed per 1,000 live births.

Note: The infant mortality rate is one of the most widely used measures of societal health. It is influenced by a number of factors in the population, including income, maternal education, and health services.

Data sources: OECD, *Health Data 2005: Statistics and Indicators for 30 Countries* (for international comparison); Statistics Canada, Canadian Vital Statistics, Birth and Death Databases

Healthy lifestyles

Measures: Healthy lifestyles are measured by physical activity and body weight.

1. *Physical activity* is the leisure time physical activity rate of Canadians aged 12 and older.
2. *Body weight* is the proportion of obese Canadians aged 18 and over. It is measured using the body mass index (BMI).

Note: Healthy lifestyles are ways of living, including control over personal health practices and choices, that individuals make and that influence their state of health. Healthy lifestyles have been shown to be clearly associated with reducing the risk of health problems.

Data limitations: BMI is used as an indicator of the subject being overweight or obese and does not take into account body composition. It therefore can confound muscle mass and bone density increases associated with increased physical activity and decreases in percentage body fat.

Data sources: OECD, *Health Data 2005: Statistics and Indicators for 30 Countries* (for international comparison); Statistics Canada, *Canadian Community Health Survey, 2003* (for Canada)

Waiting time

Measure: Waiting time is the self-reported median waiting time for specialized services by type of service and population aged 15 and over.

Data source: Statistics Canada, *Access to health care services in Canada, 2004*

Patient satisfaction

Measure: Patient satisfaction is the population aged 15 and over receiving health services in the past 12 months who rate their level of satisfaction with those services as either very satisfied or somewhat satisfied.

Note: Perceived rating of the quality of services received (rated as excellent or good) is another component of this indicator.

Data source: Statistics Canada, *Canadian Community Health Survey, 2003*

Additional health indicators sources: Canadian Institute for Health Information, *Health Care in Canada, 2004*; Health Canada, *Healthy Canadians—A Federal Report on Comparable Health Indicators, 2002*

Attitudes toward diversity

Measures: *Attitudes toward diversity* means

- ▶ personal respect toward ethnic groups; and
- ▶ support for affirmative action and employment equity, in response to the question: "Should governments require employers to advance non-whites to higher positions?"

Note: There is possible confusion between the terms *affirmative action* and *employment equity* as Canada only deals with employment equity. Affirmative action is usually limited to U.S. policies.

Data limitations: Both measures are based on a private sector survey with no regular periodicity. It is more difficult to track over time.

Data source: Environics, *2004 Focus Canada—Multiculturalism and Ethnic Tolerance*, 2004

Volunteerism

Measure: Volunteerism is the number of volunteers and the number of hours volunteered.

Data limitations: Data are based on the 1997 and 2000 iterations of the *National Survey of Giving, Volunteering and Participating* (NSGVP). Due to technical problems, the *Canada Survey of Giving, Volunteering and Participating*, which is the successor to the NSGVP, was undertaken in 2004 and not 2003 as originally forecast.

Data sources: Statistics Canada, *National Survey on Giving, Volunteering and Participating*, 2000; Ibid, *Cornerstone of Community: Highlights of the National Survey of Non-profit and Voluntary Organizations*, 2004

Political participation

Measure: Political participation is measured by voter turnout in elections.

Data sources: BBC (for the 2005 UK election); Committee for the study of the American Electorate (for the 2004 U.S. election); Elections Canada, 2004; Institute for Democracy and Electoral Assistance, 2004 (for Italy, France, and Germany); Kyodo (for the 2003 Japan election)

Participation in cultural and heritage activity

Measure: Participation in cultural and heritage activity is measured by participation in selected cultural and heritage activities. These activities may range from attending a folk festival, a rock concert, Canada Day celebrations, or the changing of the guard on Parliament Hill to going to the

theatre, movies, a park, or a zoo. Reading a book or a magazine, playing sports, or visiting a museum are also ways of participating in cultural and heritage activities.

Note: This type of participation helps to foster a nation-wide sense of shared history and multicultural heritage, thus maintaining the unique Canadian identity of "unity in diversity."

Data limitations: It is difficult to make comparisons across multiple activities as updates are infrequently on a wide range of activities at the same time. Additionally, on an international level, it is very difficult to compare leisure time activities. Surveys use varying methodologies and must respect numerous national and cultural differences.

Data source: Statistics Canada, *General Social Survey*, 2004

Safety

Measures:

1. The crime rate represents all Criminal Code incidents reported to police per 100,000 population, excluding traffic violations and violations of other federal statutes, such as drug offences
2. Violent crime includes homicide, attempted murder, assault, sexual assault, other assaults, other sexual offences, abduction, and robbery
3. Property crimes are crimes committed with the intent to acquire property without violence or the threat of violence, the most frequent of which are thefts, break-ins, theft of motor vehicles, and fraud
4. Level of fear of crime in the neighbourhood
5. Victimization rates

Data sources: Statistics Canada, *Uniform Crime Reporting Survey*, 2004; Ibid, *Juristat*, "Crime comparisons between Canada and the United States," 2001; Ibid, *General Social Survey on Victimization*, 2004; United Nations Interregional Crime and Justice Research Institute, *International Crime Victimization Survey*, 2000

Housing

Measures: Housing is the adequacy or non-adequacy of conditions according to three standards set by the National Occupancy Standard:

1. residents reporting that no major repairs are required;
2. suitability in size, with enough bedrooms for the size and makeup of the household; and
3. affordability, defined as costing less than 30.0 per cent of total before-tax household income.

Note: When incapable of meeting one or more of the following standards, a household is considered “in core housing need.” When the three standards are respected, the household is regarded as “acceptable.”

Data source: Canada Mortgage and Housing Corporation, census-based housing indicators and data, 2005

3. Canada's Place in the World

Merchandise trade

Measure: Canada's merchandise exports and imports by partner country and by commodity as well as price and volume indices on imports and exports.

Note: Merchandise trade is one component of the current account of Canada's balance of payments, which also includes services transactions, investment income, and current transfers. The data are calculated on a Customs basis.

Data limitations: Trade statistics produced by one country will frequently differ from those produced by its trading partners due to the different concepts, methods, classifications, measurements, and compilation procedures used in the collection and production of trade statistics. (Statistics Canada, 2005)

Merchandise trade statistics on a Customs basis cover the physical movement of goods as they cross the border and as they are reflected on Customs documents, while trade statistics on a balance of payments (BoP) basis contain adjustments to the Customs data to ensure consistency with BoP concepts and the national accounts framework and are designed to more fully cover the value of all economic transactions between residents and non-residents involving merchandise trade. Inland freight charges, which by convention are assumed to be paid for by the importing country, are one example of the BoP valuation adjustments made to Customs data.

Customs-based exports statistics may understate or incorrectly portray the destination of exports. Export statistics are understated when the proper documentation is not filed with Customs. Exports may also be incorrectly portrayed when the country of final destination is inaccurately reported on the Customs documentation—this occurs most frequently when goods are routed through an intermediary country before continuing on their final destination. (International Trade Canada, 2005)

Data source: Statistics Canada, 2005

Canada's investment position

Measure: Canadian direct investment abroad and foreign direct investment in Canada

Notes: Both inward and outward direct investment flows are categories in the financial account. *Direct investment* refers to investment of a resident entity in one country obtaining a lasting interest in an enterprise resident in another country. *Lasting interest* implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of

influence by the investor on the management of the enterprise. (Statistics Canada and International Trade Canada, 2005)

In practice, direct investment is deemed to occur when a company owns at least 10 per cent of the voting equity in a foreign enterprise. (Statistics Canada, 2005)

Data limitations: In the Canadian statistics, direct investment is measured as the total value of equity, net long-term claims, and net short-term claims of non-bank enterprises held by the enterprise across the border. Direct investment position series are at book value. In this report, direct investment represents the cumulative year-end positions. (Statistics Canada, 2005)

Data source: Statistics Canada, 2005

Armed conflict

Measure: The number of conflicts in the world and per region.

Note: “Armed conflict is defined as a political conflict in which armed combat involves the armed forces of at least one state (or one or more armed factions seeking to gain control of all or part of the state) and in which at least 1,000 people have been killed by the fighting during the course of the conflict. An armed conflict is added to the annual list of current armed conflicts in the year in which the death toll reaches the threshold of 1,000, but the starting date of the armed conflict is shown as the year in which the first combat deaths included in the count of 1,000 or more occurred.

“An armed conflict is deemed to have ended if there has been a formal ceasefire or peace agreement and, following which, there are no longer combat deaths (or at least fewer than 25 per year) or, in the absence of a formal ceasefire, a conflict is deemed to have ended after two years of dormancy (in which fewer than 25 combat deaths per year have occurred).” (Project Ploughshares, 2004)

Data limitations: See the Project Ploughshares Web site at <http://www.ploughshares.ca> for survey methodology.

Data source: Project Ploughshares, 2004

Perceptions of security

Measure: Polling data

Data limitations: Data are based on a sample survey and therefore subject to sampling error. See Gallup International's "Voice of the People" Web site at <http://www.voice-of-the-people.net> for survey methodology.

This is a subjective indicator—In recent years in the U.S., a higher level of perceived insecurity has been associated with a significant decline in crime rates, youth crimes, plane crashes, etc., demonstrating that perception and reality often differ considerably.

Data source: Gallup International, "Voice of the People," 2004

Official Development Assistance as a percentage of gross national income

Measure: The percentage of gross national income (GNI)

Notes: Official Development Assistance (ODA) is defined by the Development Assistance Committee of the OECD as official (government) agency funding transferred "to developing countries and multilateral institutions, which meets the following tests: a) it is administered with the promotion of the economic development and welfare of developing countries as its main objective, and b) it is concessional in character and conveys a grant element of at least 25 per cent." (OECD, 2004)

Official assistance is funding provided to countries that are not eligible to receive ODA (e.g. most of the "countries in transition" of Central and Eastern Europe) but that otherwise meet the tests above. (OECD, 2004)

GNI is a measure of the income to a country from production wherever in the world it occurs. For example, if a Canadian-owned company operating in another country sends some of their incomes (profits) back to Canada this adds to Canada's GNI. Similarly, a Canadian production of a U.S. company sending profit to the U.S. will reduce Canada's GNI.

Data limitations: See the OECD Web site at <http://www.oecd.org> for methodology.

Data source: OECD, 2005

4. Aboriginal Peoples

The information gathered in the Aboriginal Peoples chapter is derived from several sources and can refer to different Aboriginal and non-Aboriginal populations. Much of the existing data on Aboriginal people in Canada consists of program data on Status Indians from Indian and Northern Affairs Canada, the 2001 Census population data, and the 2001 Aboriginal Peoples Survey data from Statistics Canada.

The 2001 Census conducted by Statistics Canada provides data that are based on the definitions of ethnic origin (ancestry), Aboriginal identity, Registered Indian, and Band membership. Since the 1996 Census, there have been two different sets of data available on Aboriginals—one covering the “Aboriginal ancestry” of the population and the other covering the “Aboriginal identity” of the population. Before 1996, the identification of Aboriginal persons was derived from a question on ancestry, though in 1996, a new question on Aboriginal identity was added to the census. Statistics Canada stipulates that Aboriginal identity data should not be compared with Aboriginal ancestry (ethnic origin) data.

Historically, there have been some challenges in counting Aboriginal people via the Census of Canada; some caution must therefore be used in comparing census data over time. Given the limitations of the available data, the following indicators do not attempt to depict a complete portrait of the situation of Aboriginal people in Canada; rather, selected data are presented for particular indicators and populations to illustrate the larger situation and context and to highlight some key issues.

Life expectancy

Measure: The number of years a person would be expected to live, on the basis of the mortality statistics for a given observation period.

Note: Although life expectancy is a measure of longevity and not quality of life, it is widely used as an indicator of the health status of the population.

Data limitations: Because of the challenge in collecting data from all Aboriginal groups across Canada, this measure can track life expectancy on First Nations on-reserve only.

Data source: Statistics Canada, Canadian Vital Statistics Births and Deaths Database

Infant mortality

Measure: The number of deaths of children under one year of age expressed per 1,000 live births.

Data limitations: Because of the challenge in collecting data from all Aboriginal groups across Canada, this measure can track life expectancy on First Nations on-reserve only.

It should also be noted that this rate may be underestimated because of challenges in complete ascertainment of First Nations status for the purposes of vital statistics.

Data source: Statistics Canada, 2001 Census

Educational attainment

Measures: Educational attainment measures an individual's highest level of completed schooling and is sometimes used as a proxy measure of human capital. OECD has defined human capital as the knowledge, skills, competencies, and attributes embodied in individuals that facilitate the creation of personal, social, and economic well-being. Levels of education derived from the census and the *Labour Force Survey* are as follows:

- ▶ Less than high school: persons who did not graduate from high school;
- ▶ High school: high school graduates with no further education or with some post-secondary education but with no degree, certificate, or diploma;
- ▶ Trade vocational: persons with a trade certificate or diploma from vocational or apprenticeship training;
- ▶ College: persons with a non-university certificate or diploma from a community college, CEGEP, or school of nursing; and
- ▶ University: persons with a bachelor's degree, university degree, certificate above a bachelor's degree, or a certificate below a bachelor's degree.

(Council of Ministers of Education and Statistics Canada, *Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program*, 2003)

Note: The order of these categories reflects education pathways that require increasing time commitments to schooling. Each person is classified according to the highest level completed. In the census, education information is gathered for members of the population aged 15 and over. Most young people aged 15 to 24 are still in school, so their current level of education understates the skills they will ultimately bring to the labour market. The discussion on levels of education is therefore primarily about the population aged 25 to 64. From a life-cycle perspective, the age group from 25 to 64 roughly covers people who are old enough to have completed their formal education but young enough to work.

Data limitations: Some sources may restrict collection to the population aged 15 and over. Other sources, particularly provincial administrative sources, may collect for other age groups, for example, the population aged four and over. The population covered should be clearly stated in the classification. It should also be noted the data will be most meaningful when tabulated by age groups in the population, such as the population aged 25 and over, since younger groups are less likely to have achieved their life-time attainment potential.

Data source: Statistics Canada, 2001 Census

Employment rate

Measure: The percentage of Aboriginal and non-Aboriginal people employed in a specific year.

Data source: Statistics Canada, 2001 Census

Median income

Measure: The dollar amount that marks the mid-point of incomes for individuals with income in a specific group.

Data source: Statistics Canada, 2001 Census

Business Formation Rate

Measure: The number of individuals indicating they were self-employed in any given census reference year.

Note: *Self-employed* includes persons 15 years of age and over who worked since January 1, 2000, and for whom the job reported consisted mainly of operating a business, farm, or professional practice, alone or in partnership. Some examples include operating a farm, whether the land is rented or owned; working on a freelance or contract basis to do a job (e.g. architects, private duty nurses); operating a direct distributorship selling and delivering products such as cosmetics, newspapers, brushes, and soap products; and fishing with own equipment or with equipment in which the person has a share.

Data source: Statistics Canada, 2001 Census