

A. GLOSSARY OF TERMS

This document presents the definitions of terms used in the *Construction Looking Forward* 2009-2017 provincial reports. Most of the definitions are taken directly from data sources such as Statistics Canada, Human Resources and Skills Development Canada (HRSDC) and the Canada Mortgage and Housing Corporation (CMHC).

\$2002 millions indicates that the money values are in 2002 dollars (base year), that is, adjusted by inflation. This is used to calculate the real physical change of the values, factoring out growth due to increases in prices.

Average hourly earnings are the average wages per hour of work across the various industries in the economy.

Business investment expenditures are expenditures (investments) by businesses that take place in three forms:

- residential construction
- non-residential construction
- machinery and equipment

Commercial building construction investment involves the construction of commercial structures by service-producing industries with the exception of the education, health, social services and government services industries. Examples of this category include shopping centres and swimming pools. It also includes high-rise buildings five storeys and higher.

Consumer expenditures refer to the value of all goods and services purchased by households.

Consumer price index (CPI) measures the change in the average price of a group of goods and services that are normally and frequently purchased by households over time. The percentage change in this index is called CPI inflation.

Economic growth is the percentage change in the economy's real gross domestic product (GDP).

Employment is the number of people that have jobs in the economy, including both full- and part-time employees.

Engineering construction investment refers to investment in engineering structures, which includes entire engineering projects such as highways, dams, water and sewer lines, power and communication lines, roads, railway tracks, pipelines and bridges. It

also encompasses the direct or indirect cost of the movement of people, machinery, materials, gases and/or electrical impulses.

Excess supply is the difference between the number of persons in the labour force and those who are employed. It is identical to unemployment with the exception that it can take on negative as well as positive values. When excess supply is negative, it implies that employment exceeds the labour force. When it is positive, the labour force exceeds employment. A negative excess supply for a construction trade suggests there will be insufficient workers available to undertake the amount of work related to that trade.

Excess supply rate is the percentage of the labour force that is in the “excess supply” group, as defined above.

Exchange rate is the price of purchasing foreign currency measured in Canadian dollars. For example, the Canada-U.S. exchange rate specifies how many U.S. dollars are required to purchase one Canadian dollar.

Exports are the value of goods and services sold to the rest of the world (not including Canada). For a province, the rest of the world includes other provinces in Canada.

Fiscal policy refers to policies undertaken by governments (all levels) in the area of their spending and taxation. Increases in government expenditures on health and a reduction in the Goods and Services Tax (GST) are examples of fiscal policy. Policies that aim to increase economic growth are called expansionary policies. Ones that lead to slower growth are called contractionary policies.

GDP deflator measures the change in the average price of goods and services produced in the economy. This is used to derive the real GDP by dividing nominal GDP by this deflator.

Government consumption expenditures are the value of goods and services purchased by governments (all levels). These do not include transfer payments (tax return and transferences to other levels of government) or investment expenditures (definition follows).

Government investment expenditures are expenditures by all levels of government on construction and the purchase of machinery and equipment.

Gross domestic product (GDP) is the value of goods and services produced in an economy. When GDP is adjusted for changes in the prices of good and services it is called real GDP. Real GDP is a measure of the physical change in an economy’s production such as the growth in the number of cars produced. Nominal GDP, in contrast, includes both the physical change and the average change in value associated with inflation.

Household is composed of all people that occupy a dwelling unit.

Household formation is the change in the number of households from one year to the next.

Housing starts is the number of dwellings for which construction has started in a year.

Imports are the value of goods and services purchased from the rest of the world (not including Canada). For a province, the rest of the world includes other provinces in Canada.

Industrial building construction is the construction of buildings undertaken by the agriculture, forestry, fishing, mining, manufacturing, construction, utilities, transportation and warehousing industries. These include investment on factory structures and similar types of formations.

Inflation is the percentage change in prices from one period to the next.

Institutional and government building construction is investment in the construction of building structures undertaken by the education, health, social services and government services industries.

Investment in building construction represents the investment on any permanent structure with walls and a roof providing protection and shelter from the physical environment for people and/or materials. Such structures also include the machinery and equipment component that form a part of the structure with functions such as plumbing, electrical wiring, air conditioning or elevators. For example, building construction represents expenditures on aircraft hangars, factories, hospitals, hotels, office buildings, railway stations, schools and shopping centres. Investment in building construction is composed of three major components:

- industrial building construction,
- commercial building construction
- institutional and government building construction

Labour force is the number of persons that are working or are looking for work. If a person is not working and is not actively looking for work then that person is not included in the labour force.

Machinery and equipment investment is the expenditure for depreciable machinery and equipment used to produce goods and services by businesses and governments.

Monetary policy refers to policies undertaken by a country's central bank such as the Bank of Canada to influence the economy through financial markets. These policies are implemented to cause changes in interest rates in order to keep inflation under control.

Non-residential construction investment is expenditure for non-residential depreciable structures used to produce goods and services by business and governments. This investment is composed of two components:

- engineering construction
- non-residential investment

Non-residential investment is expenditure for depreciable structures, machinery and equipment used to produce goods and services by businesses and governments, excluding those for residential purposes. This investment is composed of the following three components:

- engineering construction
- non-residential building construction

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- machinery and equipment investment

Productivity is the amount of GDP produced per employed person (worker). It is calculated by dividing the total output of an economy (GDP) by its employment levels (number of employed workers).

Productivity growth is the percentage change in productivity. This growth can take negative values.

Purchasing power parity refers to the exchange rate between countries. The purchasing power exchange rate between two countries is the rate at which a person can purchase the same basket (group) of goods and services in each country for the same amount of money. It is normally considered the value of the exchange rate to which market forces will cause the actual exchange rate to move towards over time.

Seasonally adjusted refers to data that is adjusted by removing changes due to seasonal affects. This adjustment takes place so data can be comparable from one period to the next. For example, gaps in construction employment between the months of July and January can be misinterpreted due to the very different volume of activity during these two months.

Three-month treasury bill rate is the rate of interest that is paid on a treasury bill issued by the federal government that has a maturity of three months.

Unemployment refers to the number of persons in the labour force that are not working. It is calculated as the difference between the labour force and employment.

Unemployment rate is the percentage of the labour force that is unemployed (as it is defined above).

B. HISTORICAL DATA SOURCES

This section lists and defines the historical data sources used in the reports. Forecasted values in the reports are CSC's estimates, whereas the historical data has been obtained from different sources.

Economic indicators

All of the economic data referring to Canada and the provinces are sourced from Statistics Canada's Provincial Economic Accounts and the CANSIM database. The Centre for Spatial Economics estimates some of the data that are not available from Statistics Canada for use in its economic models.

The economic data for the United States are obtained from the U.S. Bureau of Economic Analysis and the U.S. Federal Reserve Board.

Investment and housing starts

The data for housing starts are obtained from the Canada Mortgage and Housing Corporation.

There are two sets of investment or capital expenditure data:

- non-residential
- residential

Both sets of data are obtained from Statistics Canada.

The data for *non-residential capital expenditures* are derived from Statistics Canada's Capital and Repair Expenditure Survey¹. They are obtained from the Investment and Capital Stock Division and are published in Statistics Canada's Fixed Capital Flows and Stocks² publications. Both current and inflation-adjusted data are available. The latter data, which are used in the CSC models and presented in the current document, are measured in millions of 2002 dollars (\$2002).

Repair expenditures are not included in the capital expenditure or investment data. According to Statistics Canada, "Repair and maintenance expenditures on construction include expenditures which do not extend the expected useful life of the structure, increase its capacity or otherwise raise its capacity. Maintenance expenditures on buildings and other structures may include the routine care of assets such as janitorial services, snow removal and/or salting and sanding by the firm's own employees or persons outside the firm's employ."

The data on residential investment are derived from data on residential values by type of investment published by Statistics Canada in CANSIM³, Table 026-0013. The latter are provided in current dollars. These data are converted to millions of constant 2002 dollars using residential construction price deflators published in Statistics Canada's Provincial Economic Accounts.

The method for determining residential investment is described by Statistics Canada and can be found on their website⁴.

Labour data

Most of the labour data referring to Canada and the provinces are sourced from Statistics Canada's 2006 Census⁵ and Labour Force Survey⁶. In some cases, the data can also be sourced from Commission de la construction du Québec (CCQ)⁷ and/or CSC's 2004 survey.

¹ Statistics Canada <http://www.statcan.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=2803&lang=en&db=IMDB&dbg=f&adm=8&dis=2>

² Statistics Canada, <http://www.statcan.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=2820&lang=en&db=IMDB&dbg=f&adm=8&dis=2>

³ Statistics Canada, CANSIM, http://cansim2.statcan.ca/cgi-win/cnsmcgi.exe?CANSIMFile=CII/CII_1_E.HTM&RootDir=CII/&LANG=E

⁴ Statistics Canada, <http://www.statcan.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=5016&lang=en&db=IMDB&dbg=f&adm=8&dis=2>

⁵ Statistics Canada, <http://www12.statcan.ca/census-recensement/2006/rt-td/index-eng.cfm>

⁶ Statistics Canada, <http://www.statcan.ca/cgi-bin/imdb/p2SV.pl?Function=getSurvey&SDDS=3701&lang=en&db=IMDB&dbg=f&adm=8&dis=2>

⁷ <http://www.ccq.org/>