The University of British Columbia (UBC) produces quarterly house price series for existing bungalows and two-story executive dwellings located in ten main metropolitan areas of Canada: Victoria, Vancouver, Calgary, Edmonton, Regina, Winnipeg, Ottawa, Toronto, Montreal, and Halifax. Bungalows are defined as detached, one-story, three-bedroom dwellings with approximately 111 square meters of living space. Two-story executive dwellings are defined as a four-bedroom house with approximately 186 square meters of living space. Prices for the two types of dwellings are obtained through the Royal LePage house price survey.

Prices are determined by Royal LePage real estate experts based on their opinions of fair market value according to house price data from each location. Royal LePage offers disaggregated data grouped by area and property type. The UBC uses this data to create a house price series for each metro area by averaging the prices of detached bungalows and detached two-story executive houses for each area. Metro data is offered at quarterly frequency, and goes back to the first quarter of 1975 for Victoria, Vancouver, Regina, Toronto, and Montreal. We compute a national house price series by aggregating the ten house price series reported by UBC using a simple unweighted mean of all cities for which we have data in a given quarter.

A significant lag emerged in the publication of the house price series produced by the UBC. To avoid this lapse in data, we now compute the Canadian house price series directly from Royal LePage disaggregated data. This affects the 2013Q1 release and all subsequent updates. We collect data on bungalows and two-story executive dwelling prices in each of the ten metropolitan areas. Within each area, prices are reported for a particular neighborhood or sub-region. First we compute a weighted average for each dwelling type in each area. We use number of private dwellings occupied by usual residents from the 2006 Census as weights. In some cases, neighborhood and sub-region population data is compiled by the city and reported on the municipal government website. When this is not available, Census Tracts are used. In cases where prices are reported for suburbs, population data represents the regions with the highest concentration of single-family detached houses. The resulting weighted averages for the two dwelling types are averaged. The Royal LePage data is available starting in 2010Q1. We use the UBC data for each metropolitan area prior to 2010. The total population from the 2011 Census is used to aggregate the house price data across the metropolitan areas. 2011 Census data is not used to weight prices within each city due to lack of neighborhood and sub-region compilations.

The house price series are not seasonally-adjusted by the source. We seasonally-adjust the aggregate data using the BSTS model and then transform the series into an index with a base year in 2005=100. We deflate this house price series using the Personal Consumption Expenditure (PCE) deflator obtained from the OECD Economic Outlook database.

We complete the Canadian data by including a Personal Disposable Income (PDI) series, reported in per capita terms. To compute the PDI per capita series we divide household disposable income by the working-age population. Both series were available at a quarterly frequency and obtained from the OECD Economic Outlook database.
The source of the current PDI and working age population data has changed. This affects the PDI per capita series for the 2012 first quarter update and all subsequent updates. Net disposable income series for households and a separate net disposable income series for non-profit institutions serving households (NPISH) are collected from Statistics Canada. Both series start in the first quarter of 1981 and are added together. We use a separate discontinued series of net disposable income for households and NPISH from Statistics Canada to extend the PDI series to the first quarter of 1975. Current working age population data is now obtained from the OECD Main Economic Indicators database. It is reported at a monthly frequency starting in January of 1995, which we average to a quarterly frequency. We use the quarterly growth rates of the discontinued working age population series from the OECD Outlook 90 database to extend the series to the first quarter of 1975. We use the PCE deflator to report the PDI per capita series in real terms. Both nominal and real PDI measures are re-based to 2005=100.

Information resources:

University of British Columbia (UBC) Centre for Urban Economics and Real Estate Data
http://cuer.sauder.ubc.ca/cma/index.html

Royal LePage

Statistics Canada
http://www5.statcan.gc.ca/cansim/a01?lang=eng
http://www12.statcan.gc.ca/census-recensement/index-eng.cfm

Bank of Canada Data
http://www.bankofcanada.ca/rates/indicators/capacity-and-inflation-pressures/real-estate-market-definitions/real-estate-market-historical-data/

Description of Bank of Canada data
http://infocentre.central1.com_/html/pdf/can_housing.pdf

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