

HOUSING MARKET ASSESSMENT

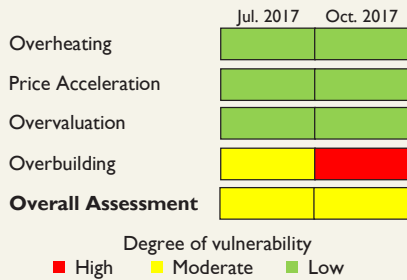
Calgary CMA

Date Released: Fourth Quarter 2017



Highlights

Results Overview Calgary CMA



- There continued to be a moderate degree of vulnerability in the overall assessment for Calgary.¹
- Increased inventories, coupled with elevated apartment rental vacancy rates, led to high evidence of overbuilding being detected.
- In this current assessment, there was low evidence of overheating, price acceleration and overvaluation.

HMA Overview²

As Canada's authority on housing, CMHC contributes to market stability by providing information on potential imbalances that could affect housing markets. With the HMA, CMHC offers information and analysis that can help Canadians make more informed decisions.

The HMA combines the results from a technical framework with insights gained through CMHC's Market Analysts' knowledge of local market conditions. These insights position CMHC to provide additional context and interpretation to the results of the HMA framework.

The HMA framework detects degrees of vulnerability in local housing markets by identifying imbalances. An example would be the detection of overbuilding, a situation in which the inventory of unsold new homes

accumulates due to supply outpacing demand. Such an imbalance could be resolved by an adjustment in house prices. As an example, lower prices would help resolve an excess supply imbalance by supporting stronger demand and/or reducing supply. However, other unexpected developments that do not originate from the housing market could accentuate or reduce an imbalance.

Colour codes indicate the degrees of market vulnerability. The HMA is a comprehensive framework that considers the intensity of signals of imbalances (that is, how far the indicator is from its historical average), and the persistence over time. Generally, low intensity and persistence are associated with potentially low degree of vulnerability. As the number of intense and persistent signals increases, the associated degree of vulnerability increases.

In Detail

Overheating

CMHC's HMA Framework detected low evidence of overheating as the sales-to-new listings ratio was below the threshold of 85%. The seasonally adjusted sales-to-new listings ratio was 51.6% in the second quarter of 2017, down from 62.5% a quarter earlier. There was a lift in new listings, outpacing the number of sales. New listings on a seasonally adjusted basis increased 17.5% from the first to the second quarter. This represented the strongest quarter-over-quarter gain since the second quarter of 2014. On the other hand, seasonally adjusted sales in the second quarter declined slightly from a quarter earlier to 6,059 units. Despite the decline, seasonally adjusted sales were still above 2016

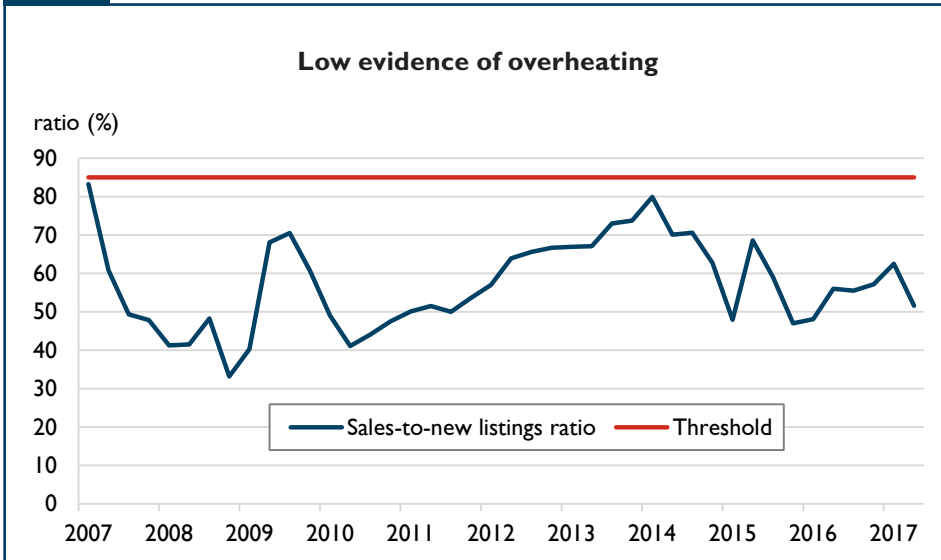
SUBSCRIBE NOW!

Access CMHC's Market Analysis Centre publications quickly and conveniently on the Order Desk at www.cmhc.ca/housingmarketinformation. View, print, download or subscribe to get market information e-mailed to you on the day it is released. CMHC's electronic suite of national standardized products is available for free.

¹ Results are based on data as of the end of June 2017 and local market intelligence up to the end of September 2017. CMHC continuously monitors market developments and will issue HMA updates on a quarterly basis.

² A detailed description of the framework is available in the appendix of the [National edition](#).

Figure 1



Source: CREA, calculations (threshold) by CMHC
Last data point: 2017Q2

quarterly levels, and on an actual basis, sales to the end of June were up 11.1% year-over-year.



Richard Cho
Principal, Market
Analysis (Calgary)

“Combined with an elevated rental apartment vacancy rate, the number of completed and unsold units per 10,000 population have increased well above historical averages. Demand for newly completed units declined due to the economic slowdown, contributing to a rise in inventories in the last couple of years. While the imbalance for overbuilding has increased from the previous assessment, the evidence for overheating, price acceleration, and overvaluation, continued to remain low.”

Price Acceleration

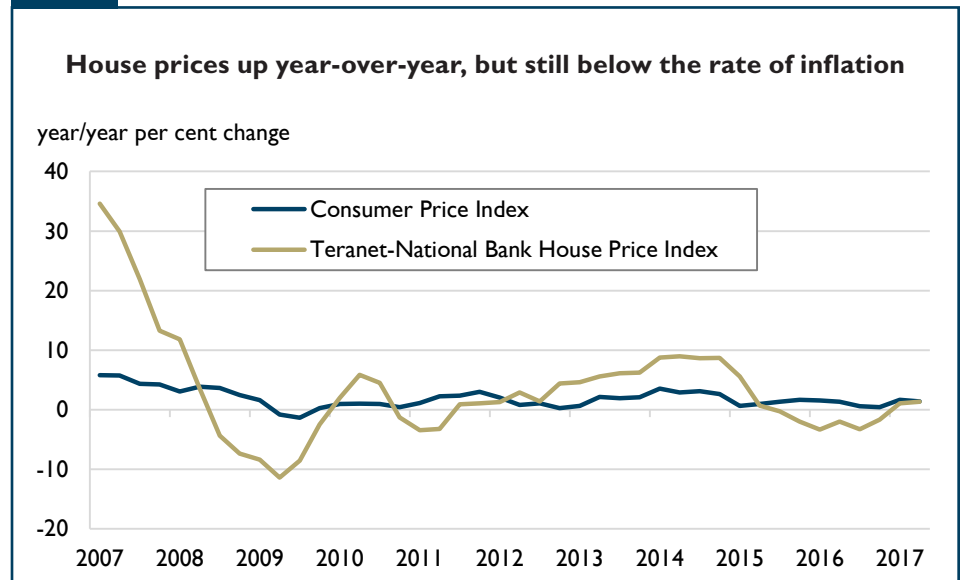
There was low evidence of price acceleration in the second quarter of 2017. The Calgary housing market has been in buyers' market conditions

for over two years, holding back price growth. The seasonally adjusted Teranet-National Bank House Price Index™ in the second quarter declined slightly from a quarter earlier and was up only 1.3% year-over-year. Although house prices have increased from the previous year, the gains have still been below the rate of inflation. Growth in house prices across all housing types have been relatively weak, especially in the apartment segment. While economic conditions have improved along with demand for housing, the uptick in supply has helped hold back price pressures.

Overvaluation

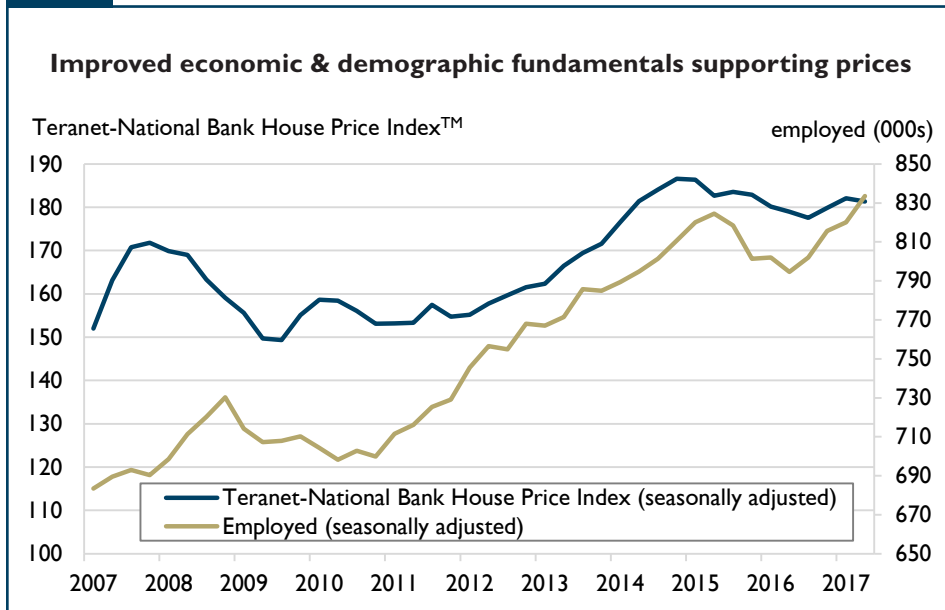
In the second quarter of 2017, the evidence for overvaluation was low as house prices have continued to stabilize. The seasonally adjusted Teranet-National Bank House Price Index™ in the first and second quarter of 2017 have been above 2016

Figure 2



Source: Teranet and National Bank, Statistics Canada, CMHC calculations
Last data point: 2017Q2

Figure 3



Source: Teranet and National Bank, Statistics Canada
Last data point: 2017Q2

levels. Improvements in economic and demographic conditions have helped support demand for housing. In the first six months of the year, employment increased 3.6% from the corresponding period a year earlier, and a majority of the jobs created were full-time positions. In addition, the young adult population has grown and so have incomes, albeit modestly, from the previous year.

Overbuilding

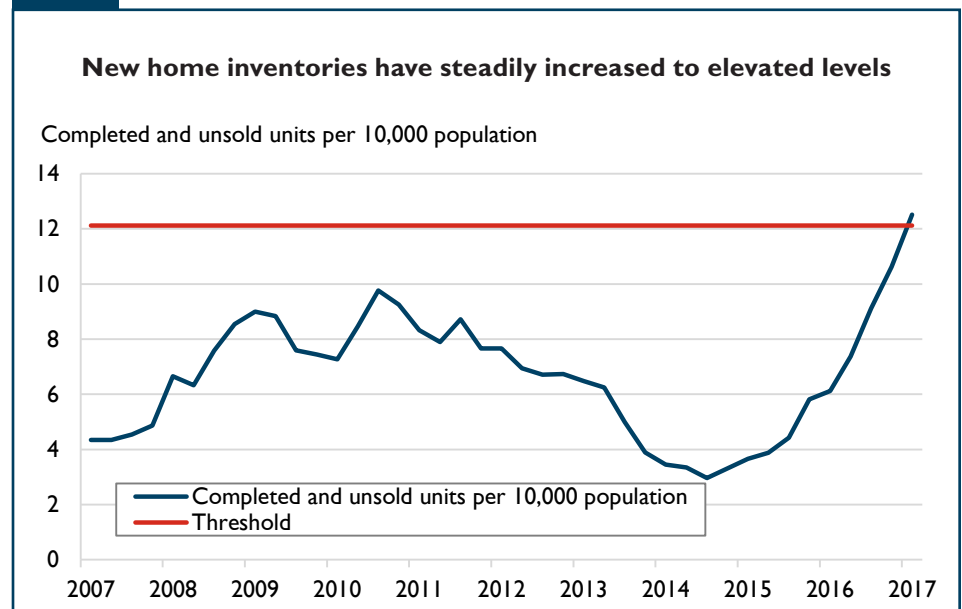
CMHC's HMA Framework detected high evidence of overbuilding in Calgary. The number of completed and unsold units in inventory per capita, along with the rental apartment vacancy rate, are elevated. In June 2017, new home inventories totalled 1,917 units, compared to the 2007-2016 monthly average of 831 units. The gains were largely recorded in the multiple segment where there were 1,478 units in inventory in June, compared to 733 units in the same

month a year earlier. New multiple construction reached record highs prior to the economic slowdown,

when demand for newly completed units declined. For instance, in 2016 only 75% of multiple units were absorbed in the same month construction was completed, and this ratio declined to 64% in the first six months in 2017. As such, inventories had steadily increased. However, with fewer units under construction and improving economic conditions, inventories are expected to move lower in the second half of 2017.

Rental supply in both the primary and secondary markets increased between the October 2015 and October 2016 survey periods. Investors added over 1,300 apartment condominium units to the secondary rental market while the purpose-built rental market also expanded by nearly 1,300 units. While rental demand had started to improve, it has not kept up with the rise in supply. The rental apartment vacancy rate reached 7.0% in October 2016, an increase from 5.3% in the same month in 2015.

Figure 4



Source: Statistics Canada and CMHC
Last data point: 2017Q2

Overview of the Housing Market Assessment analytical framework

To obtain an accurate picture of the overall state of the housing market, it is important to consider multiple data points and lines of evidence rather than relying on just one measure or indicator.

The Housing Market Assessment (HMA) analytical framework provides a comprehensive and integrated view that relies on a combination of signals from several indicators to detect imbalances in housing markets.

Specifically, the framework considers four main factors that may provide an early indication of vulnerability in the housing market: (1) overheating (when demand outpaces supply); (2) sustained acceleration in house prices; (3) overvaluation of house prices in comparison to levels that can be supported by housing market

fundamentals (listed below); and, (4) overbuilding (when the inventory of available housing units is elevated).

For each factor, the framework tests for: (1) the incidence of signs of vulnerability, but also considers; (2) the intensity of the signals, i.e. how their magnitude compares with their historical average or how consistent they are with known or suspected house price bubbles, such as for Toronto in the late 1980s and early 1990s; and, (3) the persistence of signals over time.

Generally, a situation in which we detect few signals with low intensity or lack of persistence is associated with a low degree of vulnerability. Conversely, as the intensity, number, and/or persistence of the signals increases, so does the evidence of imbalances in the housing market.

The framework takes into account demographic, economic, and financial determinants of the housing market such as population, personal disposable income, and interest rates to detect vulnerability. The framework also takes into account developments in both resale and residential construction markets.

The framework was developed on the basis of its ability to detect vulnerable housing market conditions in historical data, such as the house price bubble Toronto experienced in the late 1980s and early 1990s. The ability of the HMA to detect vulnerabilities relies on the assumption that historical relationships between prices and fundamental drivers of housing markets have not changed.

Housing Market Assessment Factors

Overheating

Overheating is caused by demand significantly and persistently outpacing the supply of housing. The sales-to-new listings ratio is used as an indicator to assess possible overheating conditions in the existing home market. To identify signs of overheating, the framework compares the sales-to-new listings ratio to thresholds. When demand is strong relative to supply, house prices typically grow at a faster rate. Sustained overheating on the existing home market may lead to acceleration in house prices for existing and new homes. However, as supply and demand begin to balance out, indicators of overheating (and acceleration) would begin to soften and house prices would gradually moderate.

Acceleration in House Prices

Under balanced market conditions, house prices are expected to increase over time, in line with increases in households' cost of

living. House price acceleration occurs when the growth in house prices strengthens over time on a persistent basis. Acceleration in house prices over an extended period can cause their pace of increase to depart from the overall price inflation and eventually lead to overvaluation.

To assess acceleration in house prices, the HMA framework uses a statistical test* that was developed to identify periods of accelerating asset prices.

Overvaluation

Overvaluation is detected when house prices remain significantly above the levels warranted by fundamental drivers of housing markets such as income, population, and actual and expected financing costs.

The HMA framework uses combinations of different house price measures and models to estimate house price levels warranted by fundamental drivers.

The difference between observed house prices and their estimated levels consistent with housing market fundamentals allows for an estimation of the degree of over- and undervaluation. The use of different price measures and models improves the reliability of results.

Overbuilding

Overbuilding is detected when the supply of readily available housing units significantly exceeds demand. In such a context, downward pressure on house prices would occur until the excess supply is eventually absorbed. To assess signs of overbuilding in the housing market, the HMA framework uses two indicators that relate to the supply of readily available housing units: the rental vacancy rate, and the inventory of completed and unsold housing units per 10,000 population. The HMA framework compares the current level and recent trends in these indicators with thresholds.

Note 1: Colour codes indicate the degree of market vulnerability. The HMA reflects a comprehensive framework that not only tests for the presence or incidence of signals of imbalances (that is, how far the indicator is from its historical average), but also considers the intensity and the persistence of these signals over time. Generally, low intensity and persistence are associated with a lower vulnerability. As the number of persistent signals increases, the evidence of an imbalance increases.

Note 2: Results at the CMA level are not segmented by housing type or neighbourhood. They represent an assessment of the entire CMA. However, specific CMA reports provide further detailed analysis of these markets.

Note 3: The colour scale extends to red only for those factors that have multiple indicators that can identify imbalances. As a result, only overvaluation and overbuilding can receive a red rating, since they are assessed using more than one indicator.

Note 4: To ensure the framework is as current as possible, on a regular basis, we undertake a model selection process whereby our house price models for overvaluation are tested for statistical significance at the national and CMA level. The result of this process may change the number of indicators showing vulnerability from the previous assessment.

* See Phillips, Wu and Yu (2008) "Explosive Behaviour in the 1990s NASDAQ When Did Exuberance Escalate Asset Values?" for further details on the methodology.

CMHC HELPS CANADIANS MEET THEIR HOUSING NEEDS.

Canada Mortgage and Housing Corporation (CMHC) has been helping Canadians meet their housing needs for more than 70 years. As Canada's authority on housing, we contribute to the stability of the housing market and financial system, provide support for Canadians in housing need, and offer unbiased housing research and advice to Canadian governments, consumers and the housing industry. Prudent risk management, strong corporate governance and transparency are cornerstones of our operations.

For more information, visit our website at www.cmhc.ca or follow us on [Twitter](#), [LinkedIn](#), [Facebook](#) and [YouTube](#).

You can also reach us by phone at 1-800-668-2642 or by fax at 1-800-245-9274.
Outside Canada call 613-748-2003 or fax to 613-748-2016.

Canada Mortgage and Housing Corporation supports the Government of Canada policy on access to information for people with disabilities. If you wish to obtain this publication in alternative formats, call 1-800-668-2642.

The Market Analysis Centre's (MAC) electronic suite of national standardized products is available for free on CMHC's website. You can view, print, download or subscribe to future editions and get market information e-mailed automatically to you the same day it is released. It's quick and convenient! Go to www.cmhc.ca/en/hoficlincl/homain

For more information on MAC and the wealth of housing market information available to you, visit us today at www.cmhc.ca/housingmarketinformation

To subscribe to printed editions of MAC publications, call 1-800-668-2642.

©2017 Canada Mortgage and Housing Corporation. All rights reserved. CMHC grants reasonable rights of use of this publication's content solely for personal, corporate or public policy research, and educational purposes. This permission consists of the right to use the content for general reference purposes in written analyses and in the reporting of results, conclusions, and forecasts including the citation of limited amounts of supporting data extracted from this publication. Reasonable and limited rights of use are also permitted in commercial publications subject to the above criteria, and CMHC's right to request that such use be discontinued for any reason.

Any use of the publication's content must include the source of the information, including statistical data, acknowledged as follows:

Source: CMHC (or "Adapted from CMHC," if appropriate), name of product, year and date of publication issue.

Other than as outlined above, the content of the publication cannot be reproduced or transmitted to any person or, if acquired by an organization, to users outside the organization. Placing the publication, in whole or part, on a website accessible to the public or on any website accessible to persons not directly employed by the organization is not permitted. To use the content of any CMHC Market Analysis publication for any purpose other than the general reference purposes set out above or to request permission to reproduce large portions of, or entire CMHC Market Analysis publications, please complete the [CMHC Copyright request form](#) and email it to CMHC's Canadian Housing Information Centre at chic@cmhc.ca. For permission, please provide CHIC with the following information: Publication's name, year and date of issue.

Without limiting the generality of the foregoing, no portion of the content may be translated from English or French into any other language without the prior written permission of Canada Mortgage and Housing Corporation.

The information, analyses and opinions contained in this publication are based on various sources believed to be reliable, but their accuracy cannot be guaranteed. The information, analyses and opinions shall not be taken as representations for which Canada Mortgage and Housing Corporation or any of its employees shall incur responsibility.

Housing market intelligence you can count on

FREE REPORTS AVAILABLE ON-LINE

Local, regional and national analysis and data pertaining to current market conditions and future-oriented trends.

- Canadian Housing Statistics
- Condominium Owners Report
- Housing Information Monthly
- Housing Market Assessment
- Housing Market Insight
- Housing Now Tables
- Housing Market Outlook, Canada
- Housing Market Outlook, Highlight Reports – Regional and Northern
- Housing Market Outlook, Canada and Major Centres
- Housing Market Tables: Selected South Central Ontario Centres
- Preliminary Housing Starts Data
- Rental Market Reports, Canada and Provincial Highlights
- Rental Market Reports, Major Centres
- Residential Construction Digest, Prairie Centres
- Seniors' Housing Reports

FREE DATA TABLES AVAILABLE ON-LINE

- Housing Construction Activity by Municipality
- Comprehensive Rental Market Survey Tables
- Comprehensive New Home Construction Tables

Get the market intelligence you need today!

Click www.cmhc.ca/housingmarketinformation to view, download or subscribe.

CMHC's Market Analysis Centre provides a wealth of local, regional, and national data, information, and analysis through its suite of reports, data tables, and interactive tools.

- **Forecasts and Analysis** – Future-oriented information about local, regional and national housing trends.
- **Statistics and Data** – Information on current housing market activities – starts, rents, vacancy rates and much more.

HOUSING MARKET INFORMATION PORTAL!

The housing data you want, the way you want it.

- Information in one central location
- Quick and easy access
- Neighbourhood level data

cmhc.ca/hmiportal

Housing Observer Online

Featuring quick reads and videos on...

- Analysis and data
- Timely insights
- Updates to housing conditions and trends & much more!

All links can be shared in social media friendly formats!

Subscribe today to stay in the know!
www.cmhc.ca/observer

