## Backgrounder

CMHC's HPAA framework is designed to detect the presence of problematic conditions in Canadian housing markets. The HPAA framework assesses housing market conditions and considers the incidence, intensity and persistence of four main risk factors:

- 1) Overheating of demand in the housing market, wherein demand significantly outpaces supply.
- 2) Acceleration in the growth rate of house prices, which could be partially reflective of speculative activity.
- 3) **Overvaluation in the level house prices** which could be partly reflective of speculative activity.
- 4) **Overbuilding of the housing market**, which suggests that supply significantly, outpaces demand.

Each of these risk factors is measured using one or more indicators of housing demand, supply and/or price conditions (see table 1). The following section describes each of these risk factors in greater detail and discusses the causes behind the detection of some of those risks in particular Canadian housing markets.

Table 1: Overall housing market assessment for Canada's larger centres

		Current Overall Assessment		Risk Factors				
				in house	Overvaluation	Overbuilding		
National overview	0	Low Risk – At the national level, modest overvaluation is observed, meaning house prices are slightly higher than levels consistent with personal disposable income, population growth and other factors. Overheating, acceleration in house prices and overbuilding are not a concern at this time.	$\Leftrightarrow$	$\Leftrightarrow$	$\Leftrightarrow$	$\Leftrightarrow$		
Vancouver	•	Low Risk – Despite high Vancouver home prices, demand for housing across the price spectrum is supported by a growing population and growth in personal disposable income. First-time home buyers focus on lower-priced options in suburban locales. At the upper end of the price spectrum, high networth residents, and those who have gained equity in their homes, are more likely to buy single-detached homes in central locations and luxury properties. Employment growth, long term population growth, and a limited supply of land for development provide further support to Vancouver prices.	$\Leftrightarrow$	$\Leftrightarrow$	$\Leftrightarrow$	$\Rightarrow$		

Calgary	0	Low Risk – Risk of overvaluation reflects the combination of strong growth in house prices and modest gains in personal disposable income. The economy is being impacted by lower oil prices and slower inflows of migrants that will likely contribute to an expected slowdown in the rate of price growth in 2015. There is also the potential for downward pressure in house prices given the decrease in MLS® sales and the decrease in the sales-to-new listings ratio to levels consistent with buyer's market conditions, which could alleviate the risk of overvaluation.	$\Leftrightarrow$	$\Leftrightarrow$	Î	$\Leftrightarrow$
Edmonton	0	Low Risk – While price growth has increased slightly since 2011, price increases remain in line with growth in the population of first-time home buyers and growth in personal disposable income. As is the case for Calgary, the economy is being impacted by lower oil prices and slower inflows of migrants that will likely contribute to an expected slowdown in the rate of price growth in 2015.	$\Leftrightarrow$	$\Leftrightarrow$	$\Leftrightarrow$	$\Leftrightarrow$
Saskatoon	•	Low Risk – With a faster pace of housing starts in 2014 compared to the previous year, the number of units under construction and the number of completed and unsold units relative to population are historically high. As units under construction are completed, the risk is that the number of completed and unsold units will move even higher. Rising inventories should have a moderating effect on housing starts.	Î	<b>‡</b>	$\Leftrightarrow$	Î
Regina	•	<b>High Risk</b> – Strong price growth in recent years has led to price acceleration. Risk of overvaluation reflects the combination of strong growth in house prices and modest gains in personal disposable income. Over the past year, higher supply relative to demand has had a moderating effect on average resale price growth. Despite fewer starts in 2014, the inventory of completed and unsold units is at a record high. It is particularly elevated for condominium apartments. So far in 2015, builders have been scaling back production.	1	<b>⇔</b>	$\leftrightarrow$	Î
Winnipeg	•	<b>High Risk</b> – Risk of overvaluation reflects relatively more modest gains in income than in house prices. Also, the number of units under construction and the number of completed and unsold units are high. Single-detached builders have responded to higher inventories by reducing the number of starts, however multi unit builders will be slower to respond as several projects in the planning stages will likely proceed over the next year.	Î	<b>+</b>	$\leftrightarrow$	$\Leftrightarrow$
Toronto	<u> </u>	Moderate Risk – Risk of overvaluation is due to steady price growth that has not quite been matched by growth in personal disposable income. The level of completed and unsold units and the rental vacancy rate are both below their respective historical averages. However, condominium units under construction are near historical peaks. Inventory management is necessary to make sure that the currently elevated number of condominium units under construction does not remain unsold upon completion.	$\Leftrightarrow$	$\Rightarrow$	Î	Î
Ottawa	0	<b>Low Risk</b> – Despite moderation in house price growth, the risk of overvaluation reflects the combination of strong growth in house prices in the last few years and modest gains in personal disposable income.	1	$\Leftrightarrow$	1	$\Leftrightarrow$
Montréal	0	Moderate Risk – Risk of overvaluation reflects slower growth in first time home buyer demand combined with house price growth exceeding growth in personal disposable income since 2004. Condominium units under construction are near historical peaks. Inventory management is necessary to make sure that the currently elevated number of condominium units under construction does not remain unsold upon completion.	1	$\Leftrightarrow$	Î	Î
Québec	0	<b>Moderate Risk</b> – Risk of overvaluation reflects slower growth in first time home buyer demand since 2012, combined with house price growth that has generally exceeded growth in personal disposable income since the early 2000s.	1	$\Leftrightarrow$	$\Leftrightarrow$	$\Leftrightarrow$

Halifax		<b>Low Risk</b> – Despite moderation in house price growth, house price growth has experienced stronger gains than population and personal disposable income.	1	$\Leftrightarrow$	1	$\Leftrightarrow$
St. John's	•	Low Risk – House prices accelerated in 2012-2013 but have recently moderated. Nevertheless, a warning signal was maintained for now because acceleration in house prices can cause house prices to depart from levels warranted by drivers of housing activity, eventually leading to overvaluation. However, if the current trend persists, the warning signal will be removed in a year. There is a downside risk to current housing conditions going forward as a result of lower oil prices.	<b>\$</b>	$\Leftrightarrow$	$\Leftrightarrow$	<b>‡</b>

Level of risk

Low risk

Moderate risk

High risk

Direction of risk from the last assessments

→ Stable, unchanged

Increased

Decreased

**Note 1: Colour codes indicate the level of risk:** The HPAA does not only test for the presence or incidence of signals of potentially problematic conditions, but also considers the intensity of signals (that is, how far the signal is from its historical average) and the persistence of signals over time.

Generally, low intensity and persistence are associated with a lower potential of evolving into a problematic condition. As the number of persistent signals increases, the associated risk of a problematic condition developing increases.

**Note 2: Arrows indicate the direction of risk since the last assessment:** The HPAA is regularly updated over time, as new data becomes available. As a result, we are able to monitor the direction in which risks are moving or if they are stable. Also, local market analysts provide insight based on their local market intelligence that can influence the direction of risk.

For example, in the chart above, upward pointing green arrows are used to indicate that the risk has increased since the last evaluation, but the risk of problematic conditions arising remains low, nonetheless. An arrow that points downward, on the other hand, is used to indicate that the risk has lessened since the last evaluation. For example, a downward pointing red arrow indicates that risks remain elevated, but have nonetheless decreased since the last evaluation. A sideways pointing arrow indicates that the risk has not changed significantly since the previous evaluation.

**Note 3**: Results at the CMA level are not segmented by housing type or neighbourhood. They represent an assessment of the entire CMA.

**Note 4**: The colour scale extends to red only for those risk factors that have multiple indicators signaling significant incidence, intensity and persistence of potentially problematic conditions. As a result, only overvaluation and overbuilding can receive a red rating, since they are assessed using more than one indicator.