



RBC Housing Affordability Measures - Canada



Source: Statistics Canada, Royal LePage, RBC Economics Research

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HOUSING TRENDS AND AFFORDABILITY

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Housing affordability improved slightly in Canada in the fourth quarter of 2012

Housing affordability, at the national level, was mildly better in the final quarter of 2012. Homeownership costs came down for a second consecutive quarter as a share of household income thanks primarily to small declines in mortgage rates and home prices in several markets across the country. RBC's housing affordability measures fell marginally in all three housing categories in the fourth quarter (a decline represents an improvement in affordability), with the detached bungalow benchmark easing by 0.2 percentage point to 42.1%, two-storey home easing by 0.3 percentage points to 47.8%, and condominium apartment easing by 0.2 percentage points to 28.0%. The declines in the third and fourth quarters followed back-to-back increases in the measures in the first half of 2012, thereby extending the pattern of alternating periods of improvement and deterioration that has been the main characteristic of housing affordability in Canada since early 2010.

Directionless affordability trend persists

The absence of clear direction in the trend in the past three years, in turn, means that affordability pressures continue to be somewhat greater than they have been on average historically. RBC's measures still modestly exceed their averages since the mid-1980s, with the imbalance being more pronounced in the two-storey home segment. It is important to note, however, that national figures are exaggerated by extremely poor (albeit improving) affordability in the Vancouver-area market. Excluding Vancouver, RBC's measures suggest only a mild degree of affordability strain being exerted on the market at this stage in Canada. While home prices are elevated, exceptionally low interest rates keep the ownership cost burden manageable for the most part.

Affordability improving modestly in the majority of major markets

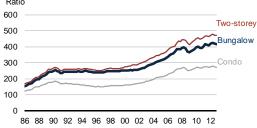
At the local level, the majority of Canada's major markets saw an improvement in affordability in the most recent quarter. As was the case in the previous quarter, the Vancouver-area market enjoyed some of the larger declines in ownership costs but remained, by far, the least affordable market in Canada. The Montreal area also experienced some notable affordability improvement in its single-family home segments (although the condominium apartment category deteriorated marginally). In general, changes in affordability across Canada's major markets were quite modest in the fourth quarter of 2012, thereby leaving the broad picture largely unchanged at the local level. Vancouver remains in a class by itself at the unaffordable end of the spectrum; two-storey homes in Toronto and, to a lesser extent, Montreal show some signs of unaffordability, while the rest of the segments and markets stand within historically 'normal' or safe ranges.

RBC Housing Affordability Measures

Price-to-household income ratio - Canada Ratio Two-storey Bungalow Condo

Price-to-rent ratio - Canada Ratio

86 88 90 92 94 96 98 00 02 04 06 08 10



 $Source: Statistics \ Canada, \ Royal \ LePage, \ CMHC, \ RBC \ Economics \ Research$

Higher interest rates still the biggest threat to affordability

While affordability levels generally do not appear to pose a threat to the housing market in Canada at the moment, things could be radically different if interest rates were to move rapidly and significantly higher. Exceptionally low mortgage rates have been the main factor preventing affordability from reaching dangerous levels in recent years. Other, stock to flow, metrics—for example, price-to-income and price-to-rent ratios—indicate that residential properties values are clearly elevated in Canada, and for many households, ownership remains accessible only because of rock-bottom mortgage rates. A sharp increase in interest rates, therefore, could be a significant blow for housing affordability in Canada; however, our base case economic scenario calls for continued low interest rates. We expect the Bank of Canada to leave its overnight rate unchanged at 1% throughout 2013 and raise it only gradually starting in early 2014—a scenario posing little in the way of imminent threat. Moreover, the eventual rise in rates will take place at a time when the Canadian economy is on a stronger footing, thereby generating solid household income gains, which in turn would provide some offset to any negative effects from rising rates.

Weaker tone to housing market activity

Canada's housing market ended 2012 on a weaker note, continuing the trend that began late in the spring. On a seasonally adjusted basis, home resales fell by 2.6% sequentially in the fourth quarter and were down 8.8% cumulatively from the second quarter. Because of strong activity at the start of last year, home resales totalled 453,000 units in 2012, representing only a small 1.2% decline from 2011. On a monthly basis, resale activity began to slide in May 2012 but fell abruptly in August, following the implementation of changes to government-backed mortgage insurance in July-which, among other things, raised the bar for first-time buyers. While month-to-month activity has largely stabilized since then, year-over-year comparisons still showed significant declines until December 2012 (the annual rate was more subdued in January 2013 at -5.2%). Despite balanced demand-supply conditions in the majority of local markets in Canada, softer homebuyer demand has weighed on home prices with modest month-to-month declines becoming common occurrences since the summer and annual gains slowing to lowsingle digits at the national level. Prices in stressed-out markets such as Vancouver even have crossed below year-ago levels. We expect market activity to remain subdued this year although see scope for some mild strengthening from fourth-quarter 2012 levels as the negative effects of the mortgage insurance rule changes gradually dissipate. Overall, we project home resales to total 439,000 units in Canada in 2013, which would be down 3.1% from 2012, and home prices to ease slightly by 1.5%.



Provincial overviews

British Columbia - Affordability improving but still has a long way to go

Housing affordability in British Columbia still has a long way to go before reaching less stressful levels, but for the second quarter in a row in the fourth quarter of 2012, homebuyers in the province saw things improve noticeably in most housing categories. RBC measures fell by 1.1 percentage points for condominium apartments and 1.0 percentage point for detached bungalows. Only the two-storey home category experienced a small increase (0.4 percentage points), although this followed a substantial decline of 3.2 percentage points in the third quarter of 2012. Poor affordability was a key factor behind a sharp 11.9% drop in BC home resales in 2012, representing one of only two provincial markets experiencing a decline last year. By the fourth quarter of 2012, BC home prices were down between 0.8% and 4.0% from a year earlier, depending on the housing type. Much of this market cooling in the province took place in the Vancouver area, where affordability tensions are greatest.

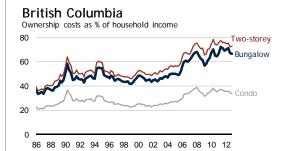
Alberta – Vibrant housing market supported by attractive affordability

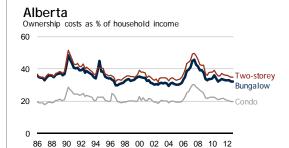
Alberta's market remained quite vibrant in the closing months of 2012. While the earlier strong pace of home resale growth slowed in the fourth quarter, the market tightened further because fewer properties were put up for sale. Brisk homebuyer demand in 2012 was supported by a strong provincial economy, accelerating population growth, and attractive affordability. Housing affordability, in fact, improved some more in the fourth quarter with RBC's measures nudging down in all three housing categories. The measures for both detached bungalows and two-storey homes declined slightly by 0.2 percentage points, and the measure for condominium apartments fell by 0.1 percentage points. While home prices are not particularly cheap in Alberta, the ability to carry ownership costs is facilitated by the province's highest household income in Canada. Barring an unexpected shock to the economy, housing market conditions should remain positive in Alberta in 2013.

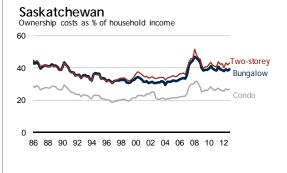
Saskatchewan - Bucking the national trend

Home resales in Saskatchewan set a new record high of nearly 14,000 units in 2012. Activity was particular brisk in the early part of the year, when homebuyer demand was bolstered by gains in the job market and decadeshigh inflows of migrants into the province. Housing momentum slowed noticeably in the latter stages of the year, however, possibly due to rising economic uncertainty undermining confidence. Nonetheless, the earlier tight market conditions had a lasting effect on home prices in the province, which continued to climb at a faster pace than in most other provincial markets in Canada in the fourth quarter. Rising property values were a key factor that caused a broadly based deterioration in affordability in the fourth quarter. RBC's affordability measures in the province increased in all categories. Two-storey homes led the way with a 1.1 percentage point rise, followed by increases of 0.7 percentage points for detached bungalows and 0.5 percentage points for condominium apartments.

RBC Housing Affordability Measures





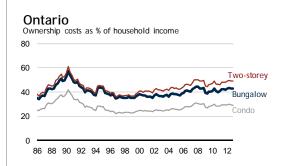


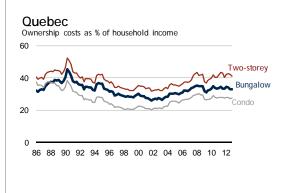
Source: Statistics Canada, Royal LePage, RBC Economics Research



RBC Housing Affordability Measures

Manitoba Ownership costs as % of household income 60 40 40 Condo 0 86 88 90 92 94 96 98 00 02 04 06 08 10 12





Source: Statistics Canada, Royal LePage, RBC Economics Research

Manitoba - Vigour unhindered by slight affordability deterioration

Manitoba's housing market also had a banner year in 2012. A record 14,000 existing homes were sold last year, which just slightly surpassed the previous mark of 13,900 units set in 2011. While most of the strength was concentrated in the first half of 2012, the cooling that took place in the latter half was fairly modest—especially when compared to the slowing that occurred in most other provinces. Sustained vigour in the market hints at housing affordability having little dissuasive effect on homebuyers. Indeed, RBC's measures continued to rank just a little above their long-term average in the province, suggesting to us that any affordability strain is likely minimal at this point. The measures deteriorated somewhat in the fourth quarter of 2012, however, with detached bungalows rising by 0.8 percentage points and condominium apartments by 0.3 percentage points. The measure for two-storey homes was unchanged.

Ontario – The transition continues

The transition from 'hot-ish' to more 'temperate-ish' housing market conditions continued in Ontario in the fourth quarter. Home resales, which reached a two-year high at the start of 2012 in the province, further glided downward, while home price increases also moderated some more. By the end of 2012, the tightness that characterized Ontario's market earlier in the year had given way to balanced conditions. The market transition taking place in Ontario contributed to some improvement in housing affordability in the province during the second half of 2012. In the fourth quarter, RBC's measures inched lower in the condominium apartment (-0.3 percentage points) and detached bungalow (-0.1 percentage points) categories. The measure for two-storey homes, however, rose marginally by 0.1 percentage points, following a substantial decline in the third quarter.

Quebec - Generally improving tone in affordability endures

Further improvement in affordability did little to stimulate homebuyer demand in Quebec in the fourth quarter. The market cooling that started in the spring of 2012 remained in full swing in the closing quarter of 2012 in the province—although activity gave some signs of stabilizing more recently in December 2012 and January 2013. Despite this cooling, overall market conditions softened only moderately, which worked to temper the rate of property appreciation rather than causing widespread depreciation. RBC's affordability measures fell in two housing categories—two-storey homes (by 1.1 percentage points) and detached bungalows (by 0.3 percentage points)—in the fourth quarter but rose for condominium apartment (by 0.4 percentage points). This generally improving tone in affordability has now been the dominant feature of the provincial market for three successive quarters. With perhaps the exception of two-storey homes, the most recent affordability levels essentially match long-term averages in the province and suggest little in the way of undue affordability-related strain on Quebec homebuyers.



Atlantic - Enviable status further boosted

Atlantic Canada's long-standing status as an affordable housing market received another boost in the fourth quarter of 2012. RBC's measures for the region dropped for both the two-storey home (-1.0 percentage point) and detached bungalow (-0.5 percentage points) segments, to levels that are at, or slightly below, their long-term average, and well below the respective national averages. Only the measure for condominium apartments rose modestly by 0.3 percentage points, although this came on the heels of a more sizable drop in the previous period. Despite little apparent affordability-related tensions, home resales continued to decline in the region in the fourth quarter, cumulating in a 13% drop since the first quarter of 2012. Such weakening in activity coupled with steady rises in the number of homes newly listed for sale in 2012 softened market conditions considerably in the region. Resales fell once again in the majority of local markets in the fourth quarter, including Halifax, Moncton, Fredericton, and Saint John. Markets such as Fredericton and Saint John now favour buyers.

Major city markets

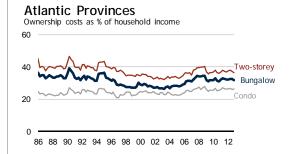
Vancouver – Market correction lessens the degree of unaffordability

The Vancouver-area market was clearly in correction mode in 2012. Home resales fell 23% from 2011 to the lowest level in 12 years if we exclude the recession in 2008 (the 2012 total, in fact, surpassed the 2008 level by less than 300 units or just 1.2%). Such weakness in the market tipped the pricing scale in favour of buyers. Following a spectacular run-up in the previous nine years, home prices fell across the board last year. By the fourth quarter, the Vancouver area was the only major market in Canada showing year-over-year price declines. The upside of this softening has been a lessening in the degree of unaffordability in the area. While Vancouver remains, by far, the least affordable market in Canada, homeownership costs eased noticeably in the latter half of 2012. In the fourth quarter, RBC's measures fell by 2.6 percentage points for detached bungalows, by 1.2 percentage points for condominium apartments, and by 0.8 percentage points for two-storey homes. Recent monthly data suggest that home resales stabilized at the start of 2013; however, persisting affordability stress will continue to weigh on the market.

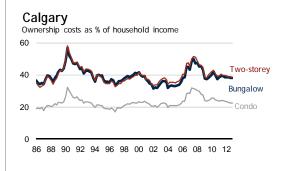
Calgary - Affordability supports market renaissance

2012 marked a kind of renaissance for the Calgary-area market, as it began to pull itself out of a four-year-long lethargy. Home resales climbed nearly 19% last year, and prices showed signs of firming up. A stronger economy and accelerating population growth played key roles in this renaissance. Attractive housing affordability, however, also contributed. Calgary homebuyers enjoyed significantly lower ownership costs as a share of their income than they faced at the market peak in early 2007, and the bar fell further in 2012. While RBC's measures changed little from the third to the fourth quarter of 2012—rising by 0.2 percentage points for detached bungalows, remaining flat for two-storey homes, and slipping by 0.1 percentage points—improvements in previous quarters pushed all measures below their previous-year levels. Moreover, Calgary is the only major market in Canada where all RBC measures are lower than their long-term averages.

RBC Housing Affordability Measures



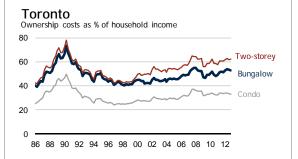


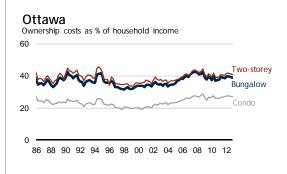


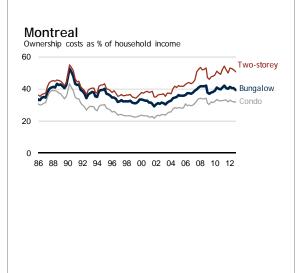
Source: Statistics Canada, Royal LePage, RBC Economics Research



RBC Housing Affordability Measures







Source: Statistics Canada, Royal LePage, RBC Economics Research

Toronto - Cooler and slightly more affordable

'Cooling' was unquestionably the central theme of the Toronto-area market in 2012. The year started strongly with brisk demand putting sellers at the helm, which drove prices up at high single-digit rates, but activity cooled considerably during the spring, summer, and early fall. This fairly quick turn of events rebalanced market conditions and even gave buyers enough choice to pressure some prices downward during the latter half of the year. Although affordability had not reached obviously problematic levels, the cumulative deterioration during the prolonged boom of the 2000s had come to exert some greater than usual stress on the market, and this stress contributed to the cooling of activity in 2012. Nonetheless, the pressure eased in the latter half of 2012 thanks to slight improvement in affordability. In the fourth quarter, RBC's measures fell by 0.4 percentage points for both detached homes and condominium apartments, although the measure for two-storey homes edged modestly higher by 0.3 percentage points. The more recent resale data for December 2012 and January 2013 suggest that the slide in Toronto-area activity may be levelling off.

Ottawa - Steady erosion of market conditions in 2012

Market conditions in the Ottawa area eroded steadily during 2012. While the total number of homes sold was nearly the same as in 2011 (down only 0.4%), the pace of activity moderated substantially as the year progressed. The in-year pattern was opposite for the number of homes put up for sale, however. This combination of weakening demand for and rising supply of homes fully released the tightness that prevailed in the market at the end of 2011 and early 2012, and gave more sway to buyers in the late stages of last year. By the fourth quarter, prices had declined for some types of housing. Affordability, meanwhile, remained largely in a holding pattern in 2012, but the softening in price late in the year helped to reduce homeownership costs somewhat. RBC's measures fell for detached bungalows (-0.5 percentage points) and two-storey homes (-0.4 percentage points) in the fourth quarter, but the measure for condominium apartments was unchanged. The latest affordability levels in the area continue to suggest that local homebuyers may be facing a modestly greater than usual affordability strain.

Montreal - Third-consecutive improvement in affordability

Although owning a home at the current market price still took a slightly bigger than usual bite out of households' budget in the Montreal area (more so in the case of owning a two-storey home), affordability improved for the third consecutive quarter in the fourth quarter of 2012. In the latest period, RBC's measures declined in two categories—two-storey homes (by 1.4 percentage points) and detached bungalows (by 0.9 percentage points)—while rising only marginally in the third (with condominium apartments up 0.1 percentage points). The improvement in affordability during most of 2012 occurred amid slowing resale momentum and mounting downward pressure on prices in the area. After a strong start to the year, home resales weakened considerably by the fourth quarter when they were down by more than 15% relative to previous-year levels. Prices for housing types such as detached bungalows and two-storey homes fell between the third and fourth quarters. While further price declines are quite possible in the near term, reasonably balanced market conditions at this stage will work to limit their extent.



How the RBC Housing Affordability Measures work

The RBC Housing Affordability Measures show the proportion of median pre-tax household income that would be required to service the cost of mortgage payments (principal and interest), property taxes, and utilities on a detached bungalow, a standard two-storey home and a standard condo (excluding maintenance fees) at the going market prices.

The qualifier 'standard' is meant to distinguish between an average dwelling and an 'executive' or 'luxury' version. In terms of square footage, a standard condo has an inside floor area of 900 square feet, a bungalow 1,200 square feet, and a standard two-storey 1,500 square feet.

The measures are based on a 25% down payment, a 25-year mortgage loan at a five-year fixed rate, and are estimated on a quarterly basis for each province and for Montreal, Toronto, Ottawa, Calgary, Edmonton, and Vancouver-metropolitan areas. The measures use household income rather than family income to account for the growing number of unattached individuals in the housing market. The measure is based on quarterly estimates of this annual income, created by annualizing and weighting average weekly earnings by province and by urban area. (Median household income is used instead of the arithmetic mean to avoid distortions caused by extreme values at either end of the income distribution scale. The median represents the value below and above which lays an equal number of observations.)

The RBC Housing Affordability Measure is based on gross household income estimates and, therefore, does not show the effect of various provincial property-tax credits, which could alter relative levels of affordability.

The higher the measure, the more difficult it is to afford a house. For example, an affordability measure of 50% means that home ownership costs, including mortgage payments, utilities, and property taxes take up 50% of a typical household's pre-tax income.

Qualifying income is the minimum annual income used by lenders to measure the ability of a borrower to make mortgage payments. Typically, no more than 32% of a borrower's gross annual income should go to 'mortgage expenses'—principal, interest, property taxes, and heating costs (plus maintenance fees for condos).

Summary tables

Detached bungalow									
	Average Price			Qualifying	RBC Housing Affordability Measure				
Region	Q4 2012	Q/Q	Y/Y	Income (\$)	Q4 2012	Q/Q	Y/Y		
	(\$)		% ch.	Q4 2012	(%)	Ppt. ch.	Ppt. ch.	(%)	
Canada*	363,400	0.1	3.8	77,200	42.1	-0.2	-0.1	39.1	
British Columbia	604,600	-1.1	-0.8	116,400	66.4	-1.0	-2.5	50.0	
Alberta	357,900	0.0	5.1	75,200	32.1	-0.2	-0.6	35.2	
Saskatchewan	350,300	2.4	7.3	74,700	39.0	0.7	0.4	36.4	
Manitoba	302,600	3.3	9.7	67,000	38.1	0.8	1.0	36.0	
Ontario	389,600	0.2	5.6	84,500	42.9	-0.1	0.9	40.3	
Quebec	236,800	1.1	3.3	52,900	32.8	-0.3	-0.4	32.6	
Atlantic	216,800	-0.9	3.2	51,900	31.9	-0.5	-0.2	31.6	
Toronto	545,600	-0.3	5.9	111,400	52.8	-0.4	1.3	48.7	
Montreal	289,400	-1.6	2.2	63,200	39.3	-0.9	-0.6	36.8	
Vancouver	782,600	-2.8	-0.9	147,200	82.2	-2.6	-3.3	59.6	
Ottawa	387,200	-0.9	3.3	87,800	38.8	-0.5	0.2	36.8	
Calgary	440,600	1.5	5.8	87,600	38.1	0.2	-0.5	39.2	
Edmonton	332,700	0.8	3.0	72,000	30.7	-0.1	-1.1	33.1	

Standard two-storey									
	Average Price			Qualifying	RBC Housing Affordability Measure				
Region	Q4 2012	Q/Q	Y/Y	Income (\$)	Q4 2012	Q/Q	Y/Y	Avg. since '85	
	(\$)	% ch.		Q4 2012	(%)	Ppt. ch.	Ppt. ch.	(%)	
Canada*	410,600	0.3	4.0	87,800	47.8	-0.3	-0.2	43.4	
British Columbia	659,700	1.1	-1.1	127,300	72.7	0.4	-2.9	55.3	
Alberta	378,800	0.1	3.7	81,200	34.7	-0.2	-1.1	37.7	
Saskatchewan	379,300	3.3	7.2	82,000	42.8	1.1	0.3	37.8	
Manitoba	302,800	0.3	4.7	67,800	38.5	0.0	-0.3	36.8	
Ontario	442,700	0.8	5.4	96,300	48.9	0.1	0.9	44.0	
Quebec	298,800	-1.3	7.1	66,100	41.0	-1.1	0.6	38.7	
Atlantic	238,000	-3.0	2.3	59,000	36.3	-1.0	-0.4	37.9	
Toronto	640,500	1.3	6.4	131,300	62.2	0.3	1.8	54.2	
Montreal	377,300	-2.1	5.3	81,000	50.4	-1.4	0.4	42.0	
Vancouver	832,800	-0.4	-1.4	157,200	87.8	-0.8	-4.0	64.9	
Ottawa	395,300	-0.8	3.0	92,000	40.7	-0.4	0.1	39.1	
Calgary	434,700	0.7	4.8	88,700	38.6	0.0	-0.9	39.6	
Edmonton	368,800	0.0	1.1	80,600	34.4	-0.3	-1.7	36.3	

Standard condominium									
	Average Price			Qualifying	RBC Housing Affordability Measure				
Region	Q4 2012	Q/Q	Y/Y	Income (\$)	Q4 2012	Q/Q	Y/Y		
	(\$)		% ch.	Q4 2012	(%)	Ppt. ch.	Ppt. ch.	(%)	
Canada*	237,600	0.2	2.0	51,400	28.0	-0.2	-0.5	26.0	
British Columbia	293,800	-3.3	-4.0	58,500	33.4	-1.1	-2.2	28.3	
Alberta	213,300	-0.1	0.6	46,000	19.7	-0.1	-1.1	21.6	
Saskatchewan	239,000	2.2	9.9	51,200	26.8	0.5	0.8	24.3	
Manitoba	193,500	2.0	9.1	42,300	24.0	0.3	0.5	21.3	
Ontario	258,700	-0.8	2.2	57,200	29.0	-0.3	-0.2	27.7	
Quebec	203,200	4.4	5.0	44,300	27.4	0.4	0.0	27.5	
Atlantic	184,400	2.6	4.0	42,900	26.4	0.3	0.0	24.7	
Toronto	332,600	-0.6	1.9	69,900	33.1	-0.4	-0.2	31.3	
Montreal	237,300	1.5	4.5	51,100	31.8	0.1	0.1	29.4	
Vancouver	388,900	-2.6	-3.5	74,800	41.8	-1.2	-2.7	32.8	
Ottawa	274,600	0.7	4.6	61,600	27.2	0.0	0.3	23.7	
Calgary	250,100	0.4	0.6	51,100	22.2	-0.1	-1.4	22.6	
Edmonton	197,200	-1.7	-1.7	43,600	18.6	-0.4	-1.4	18.0	

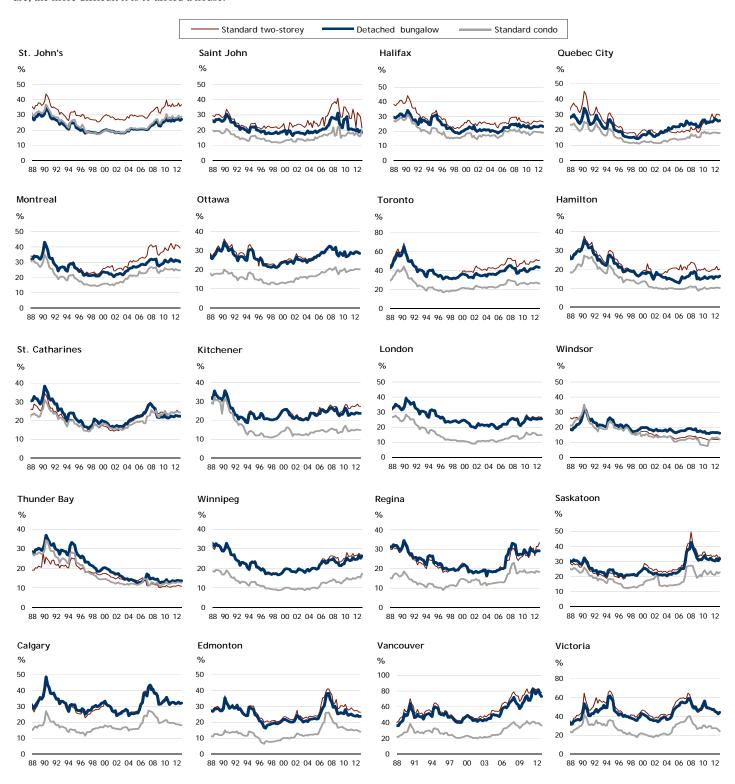
^{*} Population weighted average

Source: Royal LePage, Statistics Canada, RBC Economics Research



Mortgage carrying costs by city

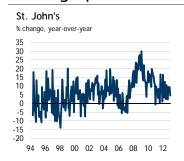
Our standard RBC Housing Affordability Measure captures the proportion of median pre-tax household income required to service the cost of a mortgage on an existing housing unit at going market prices, including principal and interest, property taxes and utilities; the modified measure used here includes the cost of servicing a mortgage, but excludes property taxes and utilities due to data constraint in the smaller CMAs. This measure is based on a 25% down payment, a 25-year mortgage loan at a five-year fixed rate, and is estimated on a quarterly basis. The higher the measure, the more difficult it is to afford a house.

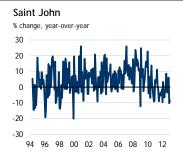


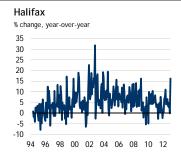
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Average price of homes sold on the MLS system

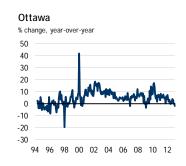


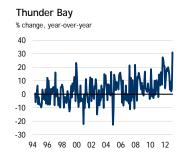




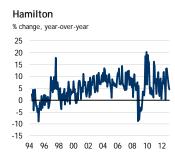


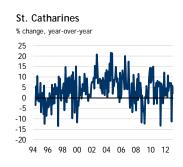










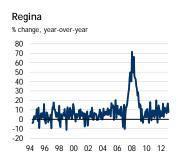






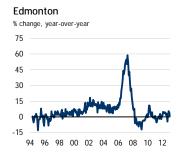
















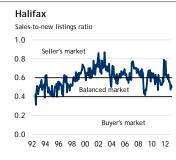
Source: Canadian Real Estate Association, RBC Economics Research



Home sales-to-new listings ratio













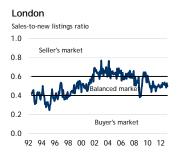






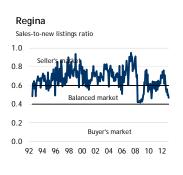


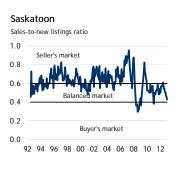




















Source: Canadian Real Estate Association, RBC Economics Research



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