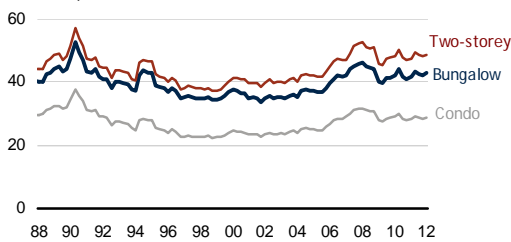


## HOUSING TRENDS AND AFFORDABILITY

May 2012

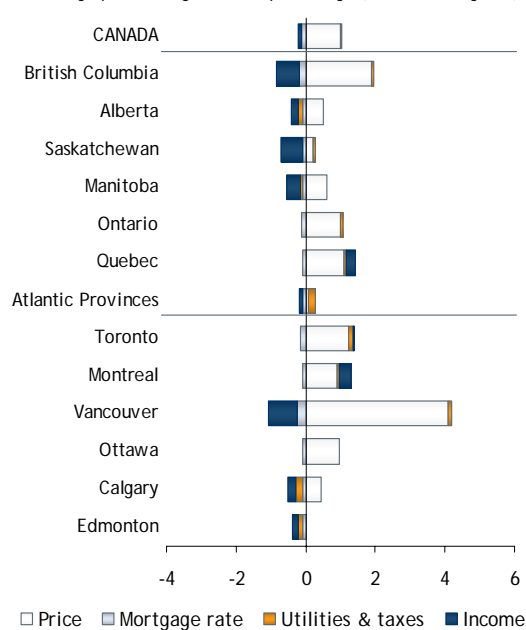
### RBC Housing Affordability Measures - Canada

Ownership costs as % of household income



### Factors contributing to the change in the RBC affordability measure

Percentage point change from a quarter ago (detached bungalow)



Source: Statistics Canada, Royal LePage, RBC Economics Research

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## Housing affordability in Canada deteriorated slightly in the first quarter of 2012

The encouraging signs for housing affordability that emerged in the second half of last year in Canada faded somewhat in the first quarter of this year when it became a little tougher, budget-wise, for Canadians to carry the costs of owning a home at market prices. Slightly deteriorating affordability, however, was an effect of vigorous housing demand in the early stages of 2012 rather than a cause of any kind of slowdown in the market and, thus, was taken in stride by housing-market participants. The modest rise in homeownership costs in the first quarter was due principally to higher home prices, which resulted, in turn, from strong demand. Very mild weather this past winter in most Canadian regions and time-limited mortgage rate ‘sales’ by financial institutions likely motivated homebuyers. Because the mortgage sales took place during only a few weeks, however, average mortgage rates during the entire first quarter fell just slightly, thereby providing only a small direct benefit to affordability for the second straight quarter.

### Mild affordability erosion across all housing types

At the national level, housing affordability eroded modestly for all three categories that we track. The RBC Housing Affordability Measures rose by 0.8 percentage points to 43.1% for detached bungalows, by 0.5 percentage points to 48.7% for two-storey homes, and by 0.3 percentage points to 28.8% for condominium apartments (an increase represents a deterioration in affordability). The measures stand slightly above historical averages in all cases. We, therefore, conclude that there is only modest affordability stress being exerted on Canadian homebuyers at the moment.

### Regional divergences persist

Stark regional divergences persisted in the first quarter. British Columbia and, more specifically, Vancouver, continued to rank at the far end of the unaffordability spectrum in the country, while markets in Alberta and Atlantic Canada were at the most affordable end. Markets in Ontario still had slightly less attractive affordability than the national average, and markets in Saskatchewan, Manitoba, and Quebec were slightly more attractive.

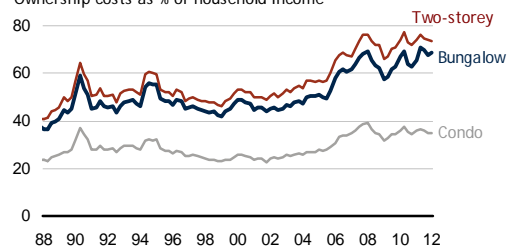
### Deterioration seen in almost all provincial markets

In the latest period, the deterioration was widespread across the country but usually mild. Vancouver (for detached bungalows) and Montreal (for two-storey homes) were two areas that saw more significant erosion. Calgary and markets in Saskatchewan and Manitoba (for two-storey homes) bucked the trend and showed improved affordability in the first quarter.

## RBC Housing Affordability Measures

### British Columbia

Ownership costs as % of household income



Source: Statistics Canada, Royal LePage, RBC Economics Research

### Vancouver still most stressed market by unaffordability

Looking at the various housing hot spots in Canada, the Vancouver market continues to be the most stressed by poor affordability and at risk of slowing down. It is not surprising that home-resale activity has been on a cooling trend since the spring last year in that area. We expect further cooling in the year ahead. In the Toronto-area market, where there have been concerns about a bubble in the condo segment, affordability is likely causing some underlying tensions, but thus far, the intensity has not been severe enough to curb demand. It is important to note that any affordability issue in the Toronto area is more likely to be found in the two-storey home segment. Similarly in Montreal, it is the two-storey home segment that has been testing the local affordability limits recently. It is also important to note that constraints on developing land in major centres such as Toronto, Montreal, and Vancouver could well keep prices for single-family homes elevated and thereby sustain poor affordability levels for such categories for some time to come.

### Rising interest rates will pose further affordability challenges

Looking ahead, we expect further challenges on the housing affordability front in Canada once the Bank of Canada begins renormalizing interest rates in the fourth quarter of this year, assuming that the European situation does not come off the rails. Exceptionally low interest rates have been the main factor keeping affordability from reaching dangerous levels in Canada in recent years. Affordability tensions, therefore, are likely to intensify somewhat next year, although the gradual pace at which we anticipate the central bank to proceed will lessen any negative effect on the housing market. This slow pace will give time for household income to increase sufficiently to provide some offset.

## Provincial overviews

### British Columbia — Poor affordability weighing on homebuyer demand

The improvement in housing affordability in the latter half of 2011 in British Columbia met some resistance in the early months of 2012, leaving affordability levels still poor in the province. The RBC measures for the three housing types that we track moved in different directions in the first quarter of this year: up by 1.2 percentage points (to 68.6%) for detached bungalows, down by 0.6 percentage points (to 73.4%) for two-storey homes, and essentially flat (up marginally by 0.1 percentage points) for condominium apartments (to 35.0%). Such divergence primarily reflected the pace of home price increases during the quarter, which was strongest for detached bungalows. Poor affordability is likely weighing on homebuyer demand and a key factor behind the slight downward trend in home resales in the province since last fall. We expect such pressure to persist in the period ahead.

### Alberta — Attractive affordability spurs housing market activity

Housing affordability continued to be attractive in Alberta in the first quarter of this year. RBC measures were either little changed (detached bungalows were up by 0.1 percentage points), unchanged (two-storey homes), or showed a small improvement (condominium apartments were down by 0.3 percentage points). The levels of Alberta's measures remained among the lower, if not, the lowest, among the provinces. With such attractive affordability and a provincial economy that is ramping up considerably, it is not surprising to see home-resale activity taking off recently. First-quarter 2012 resales were up 11.5% year over year, and the April tally showed a further substantial gain. As Alberta continues to lead the country in economic growth this year, we expect brisk housing activity to persist.

### Saskatchewan — Affordability improves; resales surge

Saskatchewan was the only provincial market showing an across-the-board improvement in housing affordability in the first quarter. Minimal price increases or even declines (in the case of two-storey homes) in the first three-month period helped lower the costs of homeownership for all housing segments in the province. The RBC measures fell between 0.2 and 2.0 percentage points, thereby representing, for the most part, the third-consecutive quarterly improvement. This latest easing in the measures brought affordability levels even closer to long-term averages in Saskatchewan, which implies that any undue stress being exerted on provincial homebuyers is dissipating. Very strong market activity since the fall of last year seems to corroborate this. Home resales have surged to record-high levels in the first quarter of this year in Saskatchewan. Rapid economic growth will continue to support the province's housing market in 2012.

### Manitoba — Affordability not an obstacle for homebuyers

There was little change in housing affordability in Manitoba in the first quarter. RBC measures rose slightly for detached bungalows (up 0.1 percentage points) and condominium apartments (up 0.4%) but edged lower for two-storey homes (down 0.2 percentage points). The share of household income needed to cover the costs of owning a home at market value was generally in line with historical norms in the province and, thus, continued to depict a broadly neutral financial burden for homebuyers. Compared to the national average, however, the Manitoba housing market is one of the more affordable in the country. Home-resale activity has been quite volatile so far this year in the province, registering a decline in the first quarter. This pullback is likely to be temporary, as a strong rebound in April confirmed that the rising trend of the past three years remains firmly in place. We expect further resales gains during the rest of this year.

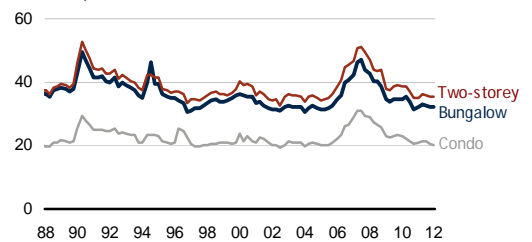
### Ontario — Possible affordability stress not slowing the market down

Housing affordability eroded slightly in Ontario in the first quarter amid rising home prices in some of the province's larger markets. RBC measures increased between 0.4 percentage points and 1.0 percentage point depending

## RBC Housing Affordability Measures

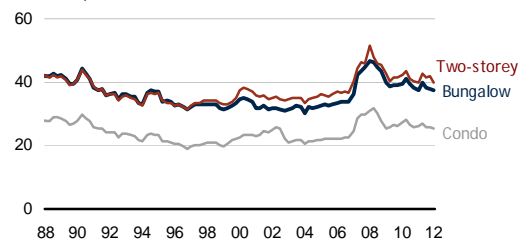
### Alberta

Ownership costs as % of household income



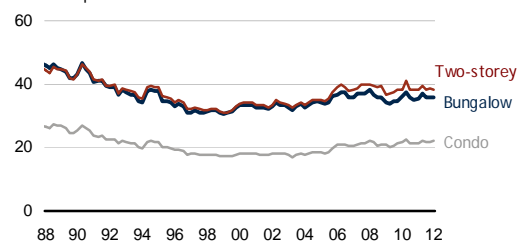
### Saskatchewan

Ownership costs as % of household income



### Manitoba

Ownership costs as % of household income

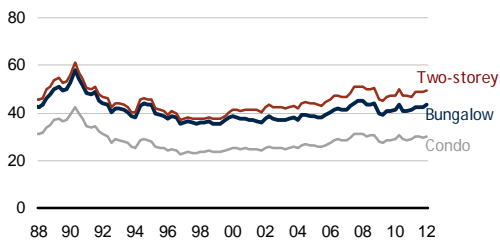


Source: Statistics Canada, Royal LePage, RBC Economics Research

## RBC Housing Affordability Measures

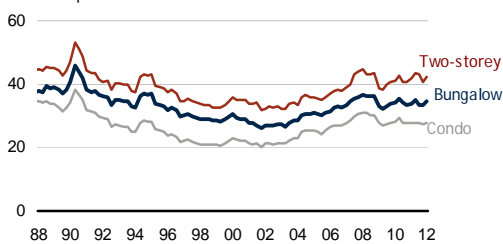
### Ontario

Ownership costs as % of household income



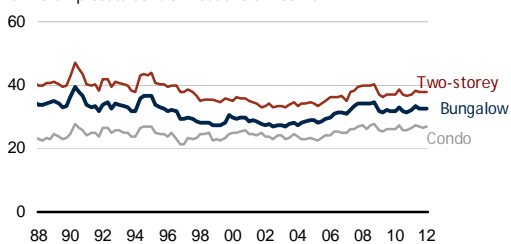
### Quebec

Ownership costs as % of household income



### Atlantic Provinces

Ownership costs as % of household income



Source: Statistics Canada, Royal LePage, RBC Economics Research

on the housing type, and were driven higher by price gains that exceeded 3% quarter over quarter in the case of detached bungalows. The affordability situation in Ontario is somewhat tougher than it has been on average in the long run, especially for single-family homes where property values appreciated the most in the past year. While this may cause some underlying stress in the market, it has yet to slow housing demand in the province. On the contrary, home resales have continued to pick up steam so far this year, and in markets such as Toronto, the supply of homes for sale barely keeps up with demand. The surge in housing starts this spring will eventually help address such tightness in the market, but prices are likely to remain firm in the meantime.

### Quebec — Last year's improvement was rolled back

The latest figures show that housing affordability in Quebec rolled back much of the improvement made in the second half of last year. Homeownership costs in the province were driven higher in the first quarter of this year by hefty price gains. In fact, the provincial market saw the strongest increases in single-family home prices in Canada during that period, which caused notable deterioration in the affordability of detached bungalows and two-storey homes. The RBC measures for these two categories climbed 1.4 and 1.7 percentage points, respectively. The measure for condominium apartments rose by a comparatively more modest 0.6 percentage points. Despite this deterioration, housing affordability remains within close range of historical norms in the province and does not appear to be exerting undue pressure on homebuyers at this point. Home resales fell slightly in the first quarter of this year but remained about 9% above the 10-year average.

### Atlantic — Affordability standing still

Levels of housing affordability stood still for the most part in Atlantic Canada in the first quarter, following back-to-back improvements in the latter half of last year. The RBC measures for condominium apartments was unchanged in the first quarter, edged up only slightly by 0.1 percentage points for detached bungalows, and up by 0.3 percentage points for two-storey homes. The share of the household budget needed to cover the costs of owning a home at market values thus remained in line with long-term averages in the region, and still compared favourably with the share in the majority of other provinces. With few affordability constraints holding them back, homebuyers continued to be quite active in the region. Home resales picked up further in the first quarter, after gaining strongly in the fourth quarter of last year. Activity in Halifax continued to be brisk. Meanwhile, home-price appreciation in the Atlantic region remained subdued for the most part, although gains in Newfoundland were more sizable. New Brunswick markets are still stuck in a slow gear.

## Major city markets

### Vancouver — Poor affordability intensifies pressure on market

The lessening of unaffordability in the second half of last year in the Vancouver area proved to be temporary. Following two-consecutive quarters of declines, home prices rebounded across all housing types in the first quarter, and this made it more difficult again for a typical household to own a home in the area. RBC measures rose between 0.3 and 3.1 percentage points in the latest period, thereby raising doubts that extremely poor affordability levels in the area will improve significantly anytime soon. Consequently, local homebuyers are likely to remain under substantial stress. Home-resale activity slowed fairly consistently since the surprising spike in the winter of 2011. Year to date, monthly resales have been almost 17% softer than the 10-year average in the area. Figures to April show that average prices have resumed a downward trend. We expect the Vancouver-area market to remain under downward pressure in the period ahead.

### Calgary — Market takes off

The long-awaited resurgence of the Calgary-housing market appears to have been launched in recent months. Home resales advanced by a sizable 7.4% in the first quarter relative to the fourth quarter of last year, and April activity showed even greater strength. Homebuyers in the Calgary area are motivated by a booming provincial economy, strong job creation, and attractive housing affordability. Despite higher resales lately, home prices so far have remained flat for the most part, with some weakness observed in condominium apartments. This has kept housing affordability in check at some of the better levels among Canada's largest cities. In fact, affordability improved modestly in the first quarter. RBC measures edged lower for condominium apartments (-0.4 percentage points) and two-storey homes (-0.3 percentages), and stayed unchanged for detached bungalows. We expect the market resurgence to continue for the remainder of this year.

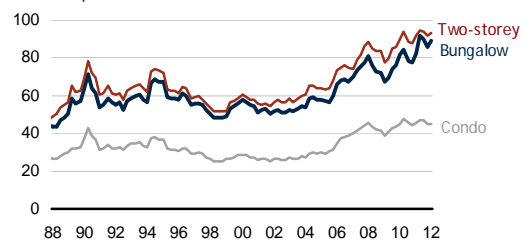
### Toronto — Firing on all cylinders

The Toronto-area housing market is firing on all cylinders. Home resales increased to their highest levels in two years in the first quarter, and year to date, monthly figures stood 14% above the 10-year average for the area. Such brisk demand has outpaced the supply of existing homes for sale in the past year, thereby making it a sellers' market. Home prices have seen a strong bid as a result, but the further tightening of market conditions lately has accelerated the gains in early 2012 (for the most part). Under these circumstances, housing affordability in the Toronto area eroded in the first quarter. RBC measures climbed between 0.5 and 1.3 percentage points to levels modestly exceeding long-term averages in the area. While affordability considerations do not appear to be a restraining factor for homebuyers at this point, we expect that this will become increasingly the case later this or next year, especially if affordability deteriorates further.

## RBC Housing Affordability Measures

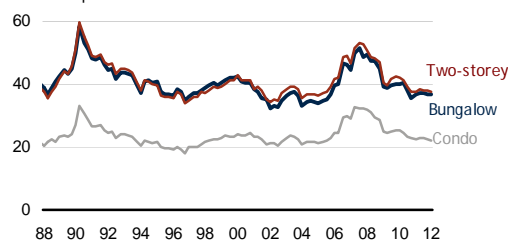
### Vancouver

Ownership costs as % of household income



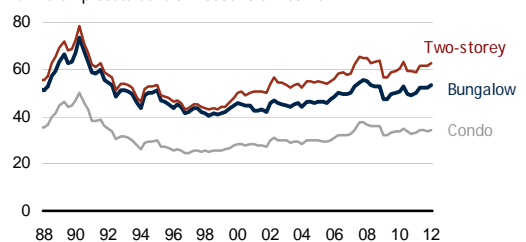
### Calgary

Ownership costs as % of household income



### Toronto

Ownership costs as % of household income

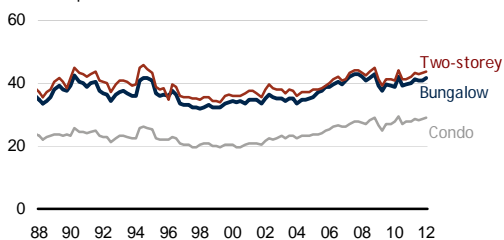


Source: Statistics Canada, Royal LePage, RBC Economics Research

## RBC Housing Affordability Measures

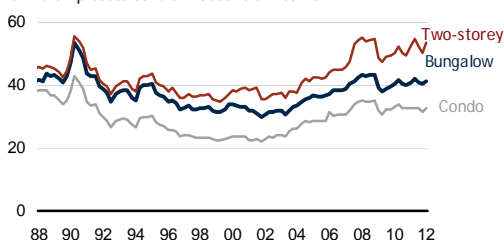
### Ottawa

Ownership costs as % of household income



### Montreal

Ownership costs as % of household income



Source: Statistics Canada, Royal LePage, RBC Economics Research

### Ottawa — Homebuyers hesitate

Ottawa-area homebuyers were a bit more hesitant to close deals in the early part of this year despite greater availability of homes for sale. Transactions reported on the multiple-listing service (MLS) system for the area fell 3.9% in the first quarter, and sales in April showed further softness. Part of this hesitation may be related to deterioration in housing affordability late last year and in the first quarter of 2012. In the latest period, RBC measures rose between 0.4 and 0.9 percentage points. While these increases were not particularly large, they lifted the levels further above the area's long-term averages, which could signal that homebuyers feel somewhat stretched in the face of current market valuations. Nonetheless, Ottawa-area affordability remains far from extreme by national standards and is not expected to exert the kind of pressure that could destabilize the market in the short term.

### Montreal — Two-storey homes pushing the affordability envelope

Home-resale activity stabilized in the Montreal area in the early months of this year following rapid acceleration during the summer and fall of last year. Recent home prices, on the other hand, gained noticeably in some housing categories (e.g., two-storey homes), although this reversed declines in previous periods. The latest sharp increase in two-storey home prices has kept affordability on a multi-year deteriorating trend for this housing category. Two-storey home affordability now pushes the envelope in the area with the RBC measure rising 2.9 percentage points in the first quarter to 53.3%, which exceeded both its long-run average of 42.5% and the current national mark of 48.7%. The cost of owning other housing types (at market price), however, does not impose as heavy a financial burden—taking only a slightly higher share of household income than what has been the average since the mid-1980s—although that burden has increased in the latest period.



## 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 lie 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

Region	Average Price			Qualifying Income (\$) Q1 2012	RBC Housing Affordability Measure			
	Q1 2012 (\$)	Q/Q % ch.	Y/Y % ch.		Q1 2012 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	360,500	3.1	6.8	77,900	43.1	0.8	1.5	39.4
British Columbia	629,300	3.3	8.8	120,800	68.6	1.2	3.0	49.8
Alberta	347,900	2.1	2.5	76,300	32.2	0.1	0.1	36.2
Saskatchewan	328,900	0.8	5.7	72,300	37.5	-0.4	-0.1	36.8
Manitoba	270,300	2.4	5.2	63,000	35.9	0.1	0.5	36.9
Ontario	380,000	3.1	7.8	84,700	43.5	1.0	2.4	40.8
Quebec	239,400	4.5	5.2	54,200	34.8	1.4	0.8	33.1
Atlantic	214,000	0.3	3.4	52,400	32.7	0.1	0.3	32.0
Toronto	530,400	3.0	8.9	110,700	53.4	1.2	3.5	49.0
Montreal	291,700	3.0	3.8	64,100	41.4	1.2	0.5	37.3
Vancouver	832,600	5.4	13.1	155,900	88.9	3.1	6.8	59.2
Ottawa	386,900	3.3	6.2	88,800	41.8	0.9	1.9	37.2
Calgary	423,000	1.5	2.3	87,700	36.7	0.0	0.2	40.1
Edmonton	322,900	0.0	-0.8	73,000	32.4	-0.4	-0.8	34.2

### Standard two-storey

Region	Average Price			Qualifying Income (\$) Q1 2012	RBC Housing Affordability Measure			
	Q1 2012 (\$)	Q/Q % ch.	Y/Y % ch.		Q1 2012 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	403,600	2.1	5.3	88,100	48.7	0.5	1.2	43.9
British Columbia	668,800	0.3	2.3	129,300	73.4	-0.6	-0.6	55.1
Alberta	372,800	2.1	2.7	83,700	35.3	0.0	0.2	38.8
Saskatchewan	339,700	-4.0	5.8	76,800	39.8	-2.0	-0.1	38.3
Manitoba	290,800	1.1	4.1	67,400	38.4	-0.2	0.2	38.0
Ontario	430,400	2.4	8.4	96,500	49.6	0.9	3.0	44.6
Quebec	292,500	4.9	3.4	66,200	42.4	1.7	0.4	39.2
Atlantic	241,500	1.1	4.6	60,900	38.0	0.3	0.8	38.4
Toronto	618,000	2.7	9.1	129,800	62.6	1.3	4.1	54.6
Montreal	382,500	6.8	4.3	82,600	53.3	2.9	0.8	42.5
Vancouver	865,500	2.4	5.3	163,100	93.0	1.0	1.5	64.5
Ottawa	393,900	2.7	6.1	93,200	43.8	0.7	1.9	39.7
Calgary	418,200	0.8	1.8	89,700	37.5	-0.3	0.1	40.7
Edmonton	371,600	1.9	1.1	84,300	37.5	0.1	-0.2	37.5

### Standard condominium

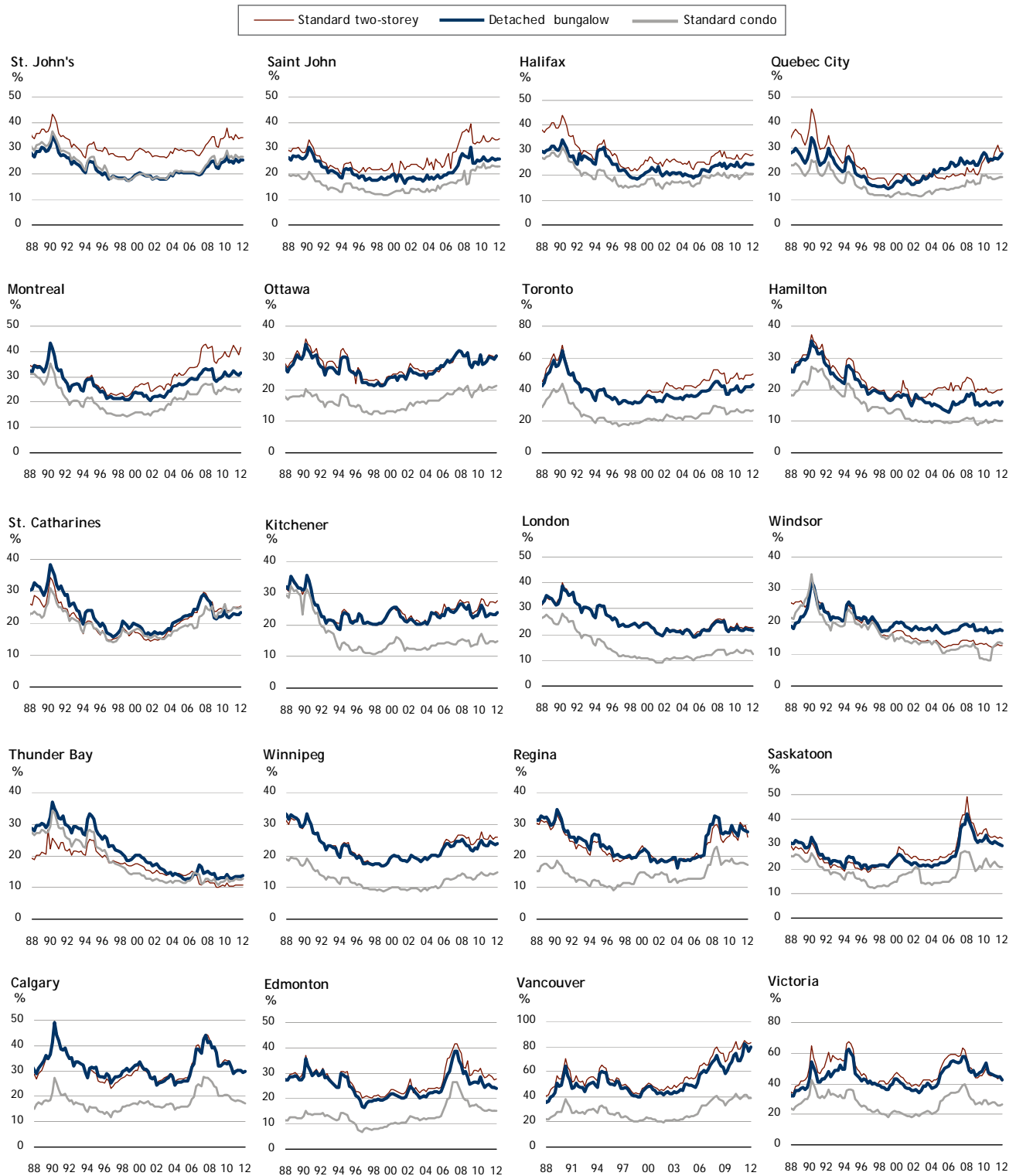
Region	Average Price			Qualifying Income (\$) Q1 2012	RBC Housing Affordability Measure			
	Q1 2012 (\$)	Q/Q % ch.	Y/Y % ch.		Q1 2012 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	235,800	1.7	3.4	52,000	28.8	0.3	0.3	27.1
British Columbia	311,400	1.8	0.7	61,700	35.0	0.1	-0.8	28.3
Alberta	212,300	0.1	-1.7	47,900	20.2	-0.3	-0.6	22.3
Saskatchewan	220,100	1.2	1.1	48,900	25.4	-0.2	-0.9	24.6
Manitoba	168,400	5.0	11.0	39,000	22.2	0.4	1.1	21.2
Ontario	257,500	1.9	5.6	58,400	30.0	0.4	1.2	28.1
Quebec	195,000	2.1	3.2	43,600	27.9	0.6	0.2	27.1
Atlantic	180,000	0.1	3.8	42,900	26.8	0.0	0.4	24.8
Toronto	332,400	1.8	5.2	71,200	34.4	0.5	1.4	31.6
Montreal	232,300	4.7	2.8	50,700	32.7	1.3	0.2	29.5
Vancouver	410,800	1.9	1.5	78,700	44.9	0.3	-0.7	32.7
Ottawa	268,400	2.2	6.0	61,400	28.9	0.4	1.3	24.0
Calgary	248,100	-0.2	-0.8	53,100	22.2	-0.4	-0.4	23.3
Edmonton	204,100	1.8	2.9	46,700	20.7	0.0	0.1	18.6

\* Population weighted average

Source: Royal LePage, Statistics Canada, RBC Economics Research

## Mortgage carrying costs by city

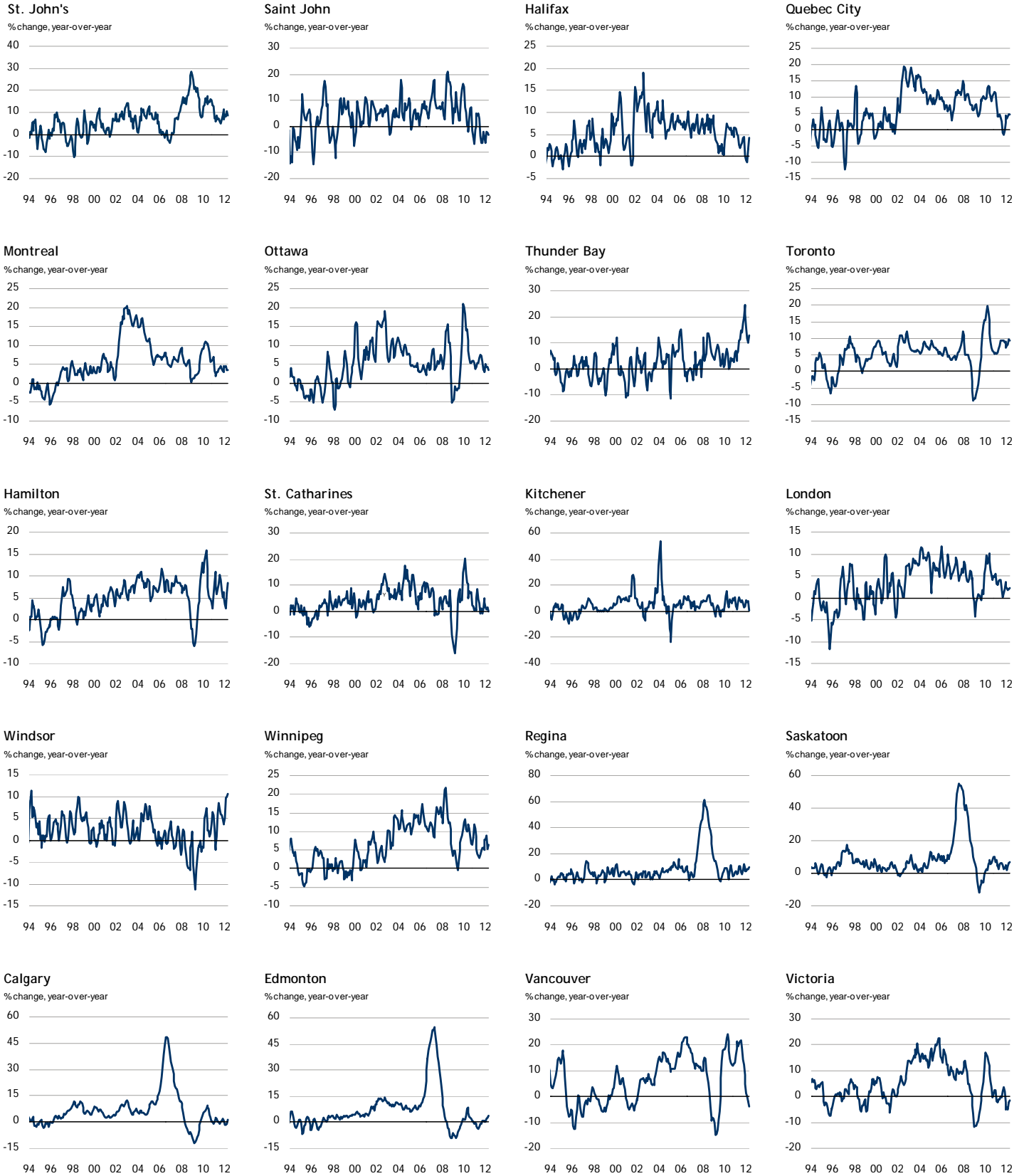
Our standard RBC Housing Affordability Measure captures the proportion of median pre-tax household income required to service the cost of a mortgage on an existing housing unit at going market prices, including principal and interest, property taxes and utilities; the modified measure used here includes 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.



Source: Statistics Canada, Royal LePage, RBC Economics Research



# Home prices

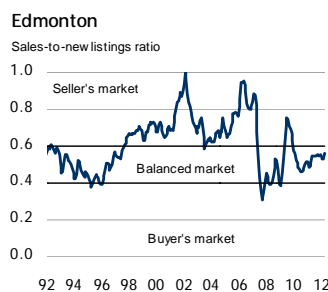
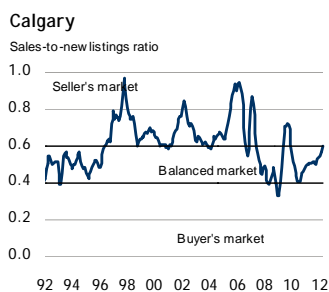
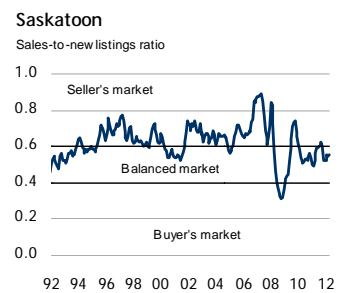
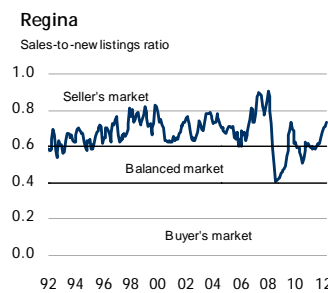
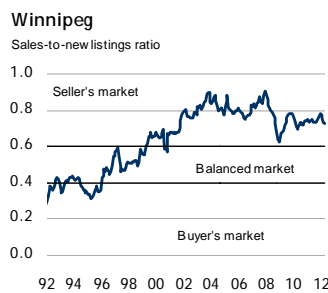
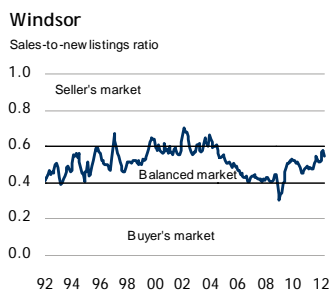
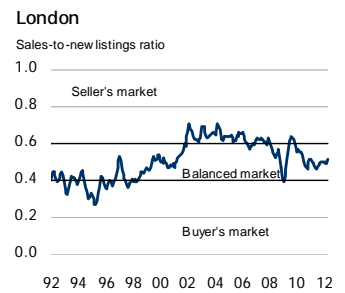
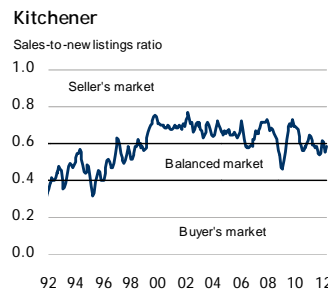
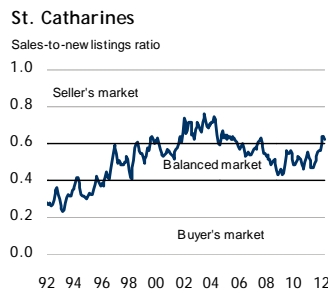
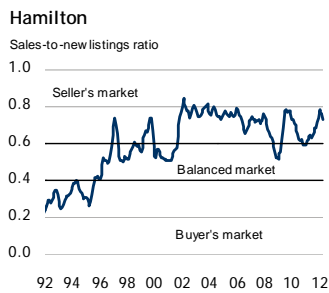
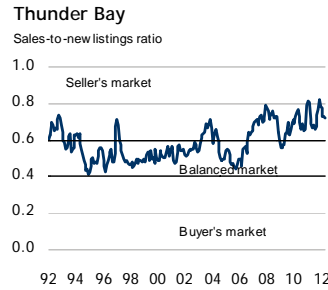
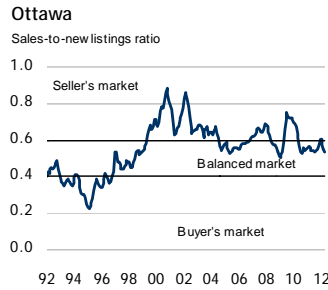
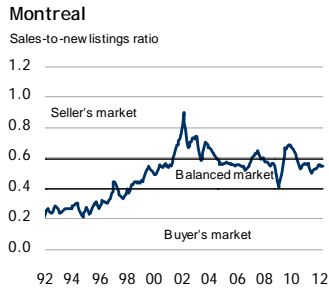
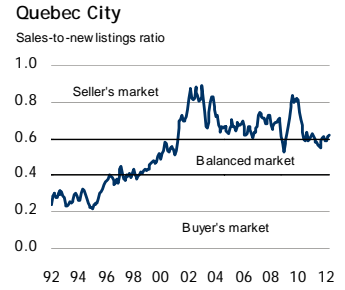
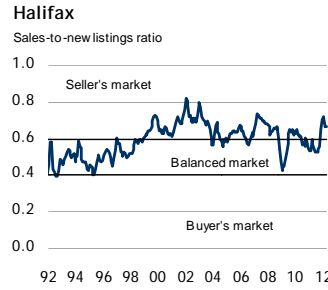
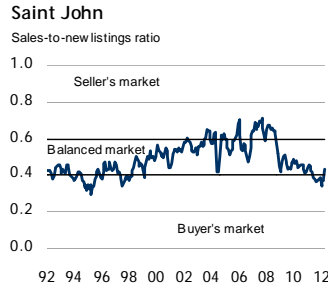
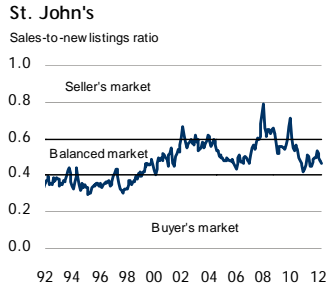


House prices are based on a three-month moving average.

Source: Canadian Real Estate Association, RBC Economics Research



# Home sales-to-new listings ratio



House prices are based on a three-month moving averages.

Source: Canadian Real Estate Association, RBC Economics Research



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