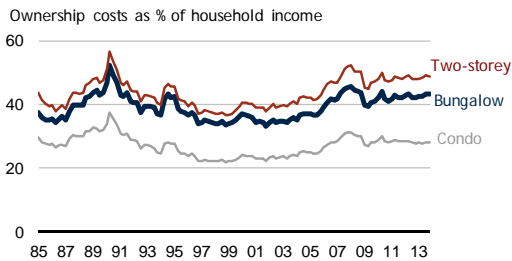


## HOUSING TRENDS AND AFFORDABILITY

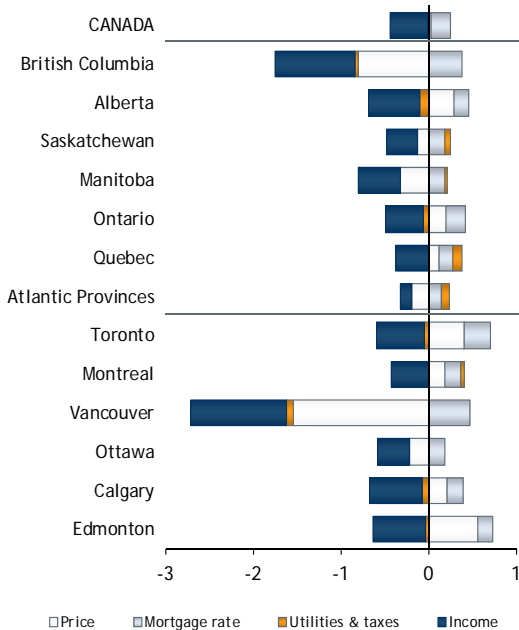
February 2014

### RBC Housing Affordability Measures - Canada



### 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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## Homeownership becomes slightly more affordable in Canada at the end of 2013

After two straight quarters of modest deterioration, housing affordability improved mildly in Canada in the fourth quarter of 2013. Despite a small increase in home ownership costs in the latest period, prospective homebuyers needed to allocate a slightly smaller portion of their income to purchase a home at market value because of the relative strength of income gains. Household income outpaced the rise in mortgage carrying costs, which was kept at bay by fairly tame property appreciation in most markets around the country and marginal mortgage rate advances (following their first notable increase in more than two years in the third quarter). RBC's affordability measures eased for all housing types at the national level in the fourth quarter: edging lower by 0.2 percentage points for both the detached bungalow (to 43.1%) and two-storey home (to 48.7%) benchmarks, and by 0.1 percentage points to 28.0% for condominium apartments (a decline in RBC's measures represents an improvement in affordability). As it stood at the end of 2013, housing affordability appeared to be somewhat stretched in Canada but still not posing any imminent threat to the health of the market.

### Sideways trends persist

Developments during 2013 left the affordability picture in Canada little changed from 2012. The quarter-to-quarter evolution was essentially a continuation of trends that began in 2010 whereby periods of mild deterioration were followed by periods of mild improvement. Such a pattern kept the annual average of RBC's measures virtually flat for single-detached homes between 2012 and 2013 at the national level, and resulted in the average level for condominium apartments inching down only slightly. In other words, the more recent affordability position is neither better nor worse than it has been since 2010.

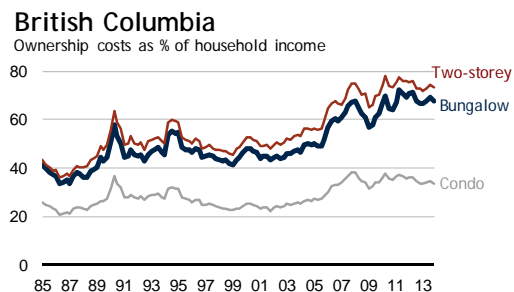
### Affordability of single-detached homes still a little more of a stretch

The broad stationary trends also mean that the divergence in relative affordability between single-detached homes and condominium apartments persists. Owning single-detached homes at market value still represent more of a stretch for homebuyers than they have historically, whereas condo apartment affordability is closer to its historical norm.

### Affordability tensions concentrated in segments in Toronto, Vancouver, and to a lesser extent, Montreal

Across Canada, any affordability tensions continue to be concentrated in a few local markets: mainly Vancouver, Toronto, and to a much lesser degree, Montreal (primarily in the two-storey home segment). During 2013, these markets saw some deterioration in affordability in single-detached homes, although in the case of Vancouver, this followed noticeable improvement in 2012. Elsewhere in the country, affordability generally remains in line with historical norms. Calgary is among the few markets (with perhaps the Atlantic region) where affordability looks attractive relative to long-run averages. The positive

## RBC Housing Affordability Measures



Source: Statistics Canada, Royal LePage, RBC Economics Research

situation in Calgary is more a reflection of strong household income than low home prices—indeed, Calgary prices are generally the third highest in the country after Vancouver and Toronto.

### Slight improvement for the most part in the fourth quarter

The majority of local markets saw affordability become slightly better in the fourth quarter of 2013. The Vancouver area posted the biggest improvement for all three housing categories; however, this only partly reversed sharp deteriorations earlier in the year. Some notable improvement also took place in the two-storey segment in Saskatchewan and Manitoba. On the other hand, affordability slipped in a few markets, including all categories of the Toronto area and condominium apartments in Manitoba and Saskatchewan.

### Home resales stabilizing

Homebuyers in Canada appeared to remain largely undeterred by any affordability issues in the late stages of 2013. They bought existing homes at historically 'normal' levels in the fourth quarter (quarterly resales were just 0.1% off the 10-year average), which represented a notable gain (8.6%) from the same period a year earlier. Nonetheless, resale activity moderated from the third quarter of 2013 (down 2.8%), thereby providing evidence that the surprising strength of last summer's rebound likely was overdone. We suspected previously that part of the resale rally reflected the transitory effects of the unwinding of earlier restraint associated with the tightening of mortgage insurance rules in 2012 and a rush by some homebuyers to lock-in lower mortgage rates last summer. Looking ahead, we expect home resales in 2014 to rise only slightly from 2013 by 0.6% to 461,000 units in Canada, therefore, remain near the recent not-too-hot and not-too-cold levels.

### Rising interest rates could erode affordability later in 2014

A key factor that will restrain growth in homebuyer demand later in 2014, in our opinion, is likely to be increasingly strained affordability in several markets across Canada. We expect that the costs of owning a home at market value in those markets will begin to outpace household income steadily (this is already the case in Toronto). Continued balance between demand and supply will sustain generally modest price increases; however, it will be projected rises in interest rates that will apply the most pressure on ownership costs in the period ahead. While we expect the Bank of Canada to leave its overnight rate unchanged in 2014, we forecast an upward drift in bond yields—the main driver of fixed mortgage rates—ahead of what is likely to be a gradual pace of policy tightening by both the US and Canadian central banks.

## Provincial overviews

### British Columbia – Affordability improvement helps bolster market sentiment

After strong back-to-back quarterly gains, home resales in British Columbia settled in near their 10-year average in the fourth quarter of 2013. Homebuyer demand recovered in the province since spring 2013, following a two-year slide in 2011 and 2012, and overall market sentiment is decisively more upbeat now compared to a year ago when there were concerns that a damaging correction was underway in Vancouver. Improved affordability across all housing categories in the province may have been further bolstered sentiment in the

fourth quarter. RBC's measure fell between 1.0 percentage point and 1.4 percentage points in the latest period; however, with levels at 73.2% for two-storey homes, 67.7% for bungalows, and 33.7% for condominium apartments, affordability still continues to be poor in the province, particularly in Vancouver.

#### Alberta – Market takes a breather; ownership gets even more affordable

The strong housing market rally since early 2010 in Alberta took a breather in the fourth quarter, as home resales slipped 5.0% from the third quarter. This step back reversed only a small portion of the steady solid gains earlier in 2013 and resales remained comfortably (12.3%) above year-ago levels in the latest period. Meanwhile, owning a home at market value in Alberta became slightly more affordable for most housing categories in the fourth quarter. RBC's measures fell by 0.5 percentage points to 34.6% for two-storey home and by 0.2 percentage points to 32.7% for bungalows. The measure for condominium apartments edged higher by 0.1 percentage points to 19.9%. Affordability levels in Alberta continue to compare favourably against both historical averages in the province and nationally. We expect that constructive affordability conditions, a booming provincial economy, and strong population growth will continue to fuel demand for housing in Alberta in the year ahead.

#### Saskatchewan – Affordability still trending sideways

Home resale activity in Saskatchewan was quite stable at elevated levels for the second consecutive quarter in the fourth quarter of 2013. Homebuyer demand continued to be supported by a healthy job market (the jobless rate stood at a 24-year low in the fourth quarter) and positive demographic trends. Housing affordability likely still played a predominantly neutral role in home-buying decisions, as affordability levels continued to be close to historical norms. The latest period saw mostly improvement with RBC's affordability measures declining by 1.1 percentage points to 40.1% for two-storey homes and 0.2 percentage points to 37.0% for bungalows. The measure for condominium apartments gained 0.4 percentage points to 25.5%; however, this represented a partial reversal of a more substantial drop earlier in 2013. Overall, affordability continues to trend primarily sideways in Saskatchewan, as it has done since 2009.

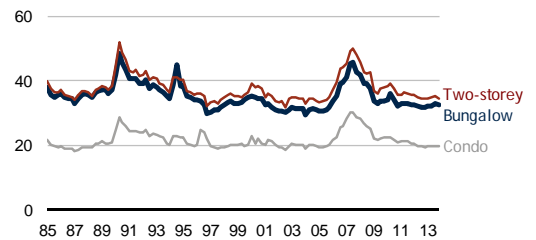
#### Manitoba – Surge in listings provides greater choice, ends up helping affordability

A surge in homes newly listed for sale weakened the demand-supply conditions somewhat in Manitoba during the second half of 2013, which eroded support for prices (for single-detached homes). Despite resales continuing to rise modestly (by 1.6% from the third quarter), buyers enjoyed increasing choice, thereby enabling them to drive prices for bungalows and two-storey homes slightly lower in the final quarter of 2013. These conditions helped improve affordability, as attested by RBC's measures for two-storey homes and bungalows slipping by 1.1 percentage points and 0.6 percentage points, respectively. This was not the case for condominium apartments, however, with fourth-quarter prices rising quite noticeably and the affordability meas-

## RBC Housing Affordability Measures

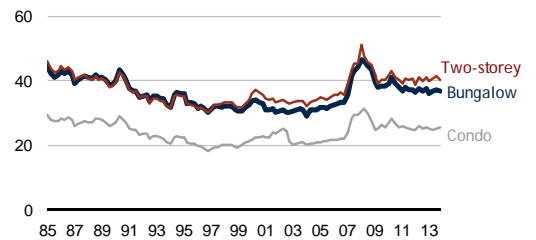
### Alberta

Ownership costs as % of household income



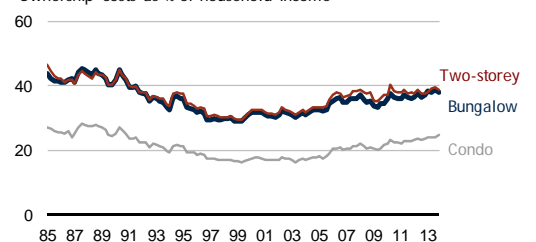
### Saskatchewan

Ownership costs as % of household income



### Manitoba

Ownership costs as % of household income

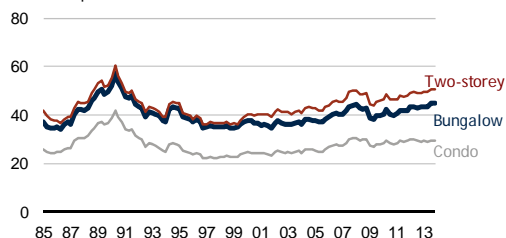


Source: Statistics Canada, Royal LePage, RBC Economics Research

## RBC Housing Affordability Measures

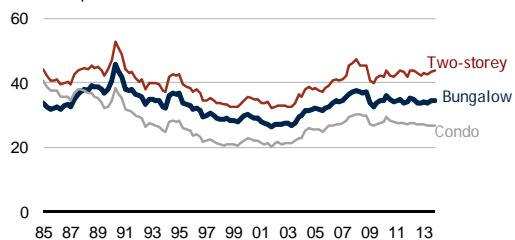
### Ontario

Ownership costs as % of household income



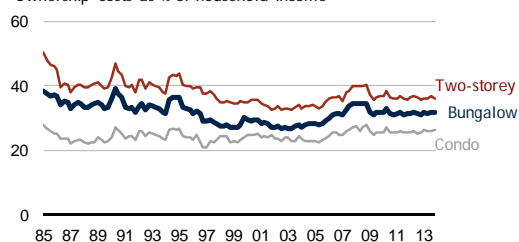
### Quebec

Ownership costs as % of household income



### Atlantic Provinces

Ownership costs as % of household income



Source: Statistics Canada, Royal LePage, RBC Economics Research

ure advancing by 0.8 percentage points. Nonetheless, condos' affordability level, as well as that for the other housing categories, continues to be reasonably aligned with long-term averages, thereby suggesting little undue affordability pressure being exerted on the market at this stage.

### Ontario – Broad picture largely unchanged: strains remain

In the fourth quarter, owning a single-detached home at market value in Ontario still took a larger share of household income than was the case historically, although there was some marginal improvement for the first time in a year. Owning a condominium apartment in the province, however, was only slightly more onerous than usual budget-wise, and this remained unchanged in the fourth quarter. The latest figures show that RBC's affordability measures eased by 0.1 percentage points for both bungalows and two-storey homes, and stayed flat for condominium apartments. Somewhat strained affordability for single-detached homes may have contributed to a 4.0% drop in provincial resales in the closing quarter of 2013; however, the level of activity essentially matched the 10-year average, hardly a sign of any particular weakness. Furthermore, a concurrent 3.3% drop in new listings could have frustrated some potential buyers who instead opted to wait for more suitable offerings at a later date.

### Quebec – Affordability not to blame for market softness

There was very little change in housing affordability in Quebec in the fourth quarter. The only observable variation was for two-storey homes, which deteriorated slightly—RBC's measure for this category inched 0.2 percentage points higher to 43.6%. Measures for bungalows and condominium apartments stayed constant from the third quarter at 34.3% and 26.7%, respectively. All measures, therefore, continued to be near their long-run average, thereby suggesting that affordability is unlikely to be a significant impediment to homebuyers in the province at this point. Nonetheless, Quebec's housing market has been a little on the soft side lately, with resales nearly 7% below the 10-year average in the fourth quarter and down 3.6% from the third quarter. This softness in part may reflect erosion in homebuyer confidence following setbacks in the provincial job market earlier in 2013. The fact that these setbacks were reversed in more recent months provides scope for some degree of strengthening in the period ahead.

### Atlantic – Homebuyers still hesitant despite decent affordability

Atlantic Canada's housing market continued to be lacklustre in the late stages of 2013 with home resales falling 3.1% between the third and fourth quarters, and activity slipping to almost 10% below the 10-year average. Homebuyer demand likely is being undermined by a stagnant labour market, fragile consumer confidence, and weak demographics in many parts of the region. It is improbable, however, that the market sluggishness has anything to do with affordability issues. Housing affordability remains at generally neutral levels in the region (aligned with historical averages) and still compares favourably with the majority of markets in Canada. There was some modest improvement for most housing categories in the fourth quarter of 2013. RBC's measures fell by 0.6 percentage points to 36.0% for two-storey homes and by just 0.1 percentage points to 31.6% for bungalows. The measure for condominium apartments, on the other hand, rose slightly by 0.2 percentage points to 26.3%.

## Major city markets

### Vancouver – Turnaround complete; affordability still poor but improved

The Vancouver-area market staged an impressive turnaround in the middle of 2013, completing the recovery from its slump in 2012 and the early part of 2013 by the fall. Since then, resale activity stabilized near the 10-year average and balance between demand and supply has been re-established. Home prices in the area resumed their upward ascent in the summer, after declining for about a year, although the pace to date has been fairly subdued and somewhat volatile. The main upside from the earlier slump is that it contributed to some improvement in Vancouver's very poor affordability standing. This window of improvement closed in the second and third quarters but re-opened a little in the fourth. In the fourth quarter, RBC's measures fell for all housing categories: down 2.3 percentage points to 81.6% for bungalows, 1.6 percentage points to 86.0% for two-storey homes, and 1.0 percentage points to 41.0% for condominium apartments. Despite these declines, levels continue to be uncomfortably high and likely purport substantial market stress.

### Calgary – Three steps forward, one step back

Home resale activity in the Calgary area took a step back in the fourth quarter (falling 5.3% from the third quarter); however, the broad trend remains very strong. Resales ramped up considerably during the first three quarters of 2013 (and during 2011 and 2012), such that levels at the closing three months of 2013 were solidly 15% higher than during the same period a year earlier. Homebuyer demand in Calgary continues to benefit from a hot labour market, fast-rising population, and booming provincial economy. It is also likely supported by fairly attractive affordability levels. RBC's affordability measures for Calgary remain some of the better ones among Canada's major markets. In the fourth quarter, RBC's measures eased for single-detached homes (two-storey homes declining by 0.3 percentage points to 34.2% and bungalows edging 0.2 percentage points lower to 33.8%) but inched higher for condominium apartments (by 0.1 percentage points to 20.0%).

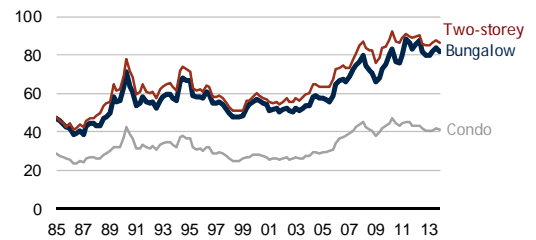
### Toronto – Stretched affordability weighing on resale activity?

The Toronto area was the only market in Canada that saw across-the-board (albeit mild) deterioration in affordability in the fourth quarter. RBC's measures rose for all housing categories: by 0.2 percentage points for both two-storey homes (to 63.7%) and condominium apartments (to 33.9%), and by 0.1 percentage points for bungalows (to 55.6%). While in and of themselves these variations in affordability were slight, they added to series of increases since 2010, thereby extending well entrenched deteriorating trends—especially for single-detached categories. Affordability of two-storey homes and bungalows in the Toronto area now appears to be stretched, as it is noticeably worse than historical norms for both categories. Owning a condominium apartment at market value also looks like a little bit of a stretch but not nearly as much as for detached homes. Affordability tensions may have been a factor in a 6.3% decline in home resales between the third and fourth quarters; however, weather (December's ice storm) and a possible lack of listings (new listings fell a cumulative 7.3% during the second half of 2013) likely were more dominant factors.

## RBC Housing Affordability Measures

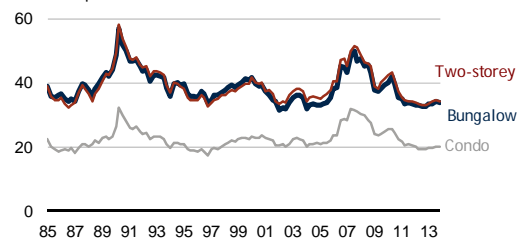
### Vancouver

Ownership costs as % of household income



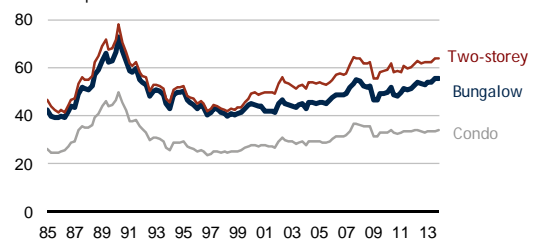
### Calgary

Ownership costs as % of household income



### Toronto

Ownership costs as % of household income



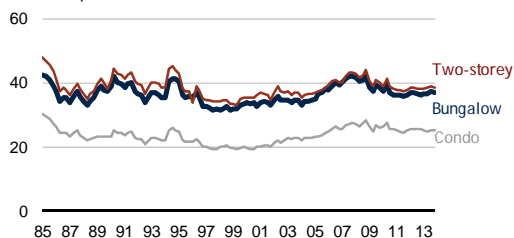
Source: Statistics Canada, Royal LePage, RBC Economics Research



## RBC Housing Affordability Measures

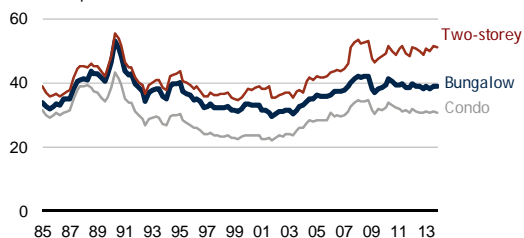
### Ottawa

Ownership costs as % of household income



### Montreal

Ownership costs as % of household income



Source: Statistics Canada, Royal LePage, RBC Economics Research

### Ottawa – Employment uncertainty eroding buyer confidence?

Home resales in the Ottawa area fell to their lowest levels since mid-2010 in the fourth quarter of 2013. This drop followed a year during which activity maintained a fairly steady pace near its 10-year average. The weakening of activity in the fourth quarter may reflect increased employment uncertainty in the area following the loss of 20,000 jobs in the Ottawa-Gatineau CMA in the first three quarters of last year. While remaining balanced overall, the demand-supply equation increasingly favoured buyers in the past two years. More recently, buyers used their greater negotiating power to drive prices lower in the area. This led to quarterly price declines in single-detached homes in the fourth quarter. The upside of this development is that it helped improve affordability in the Ottawa area. RBC's measures declined by 0.4 percentage points for both two-storey homes (to 38.4%) and bungalows (to 36.7%). The measure for condominium apartments remained unchanged at 25.1%. At this stage, housing affordability in the Ottawa area continues to be at, or close to, its long-run averages, thereby implying little undue stress on local homebuyers.

### Montreal – Rebound hit a snag; affordability generally not an obstacle

The rebound in activity in Montreal-area's market hit a snag in the fourth quarter last year, still well short of fully reversing the slide that took place in 2012 and early 2013. Home resales fell by 8.1% between the third and fourth quarters, with the level sinking 24% below the 10-year average for the fourth quarter. The Montreal area has seen a substantial increase in the number of condos for sale during 2013, and this contributed to modest price declines in this category lately. Despite the rise of condo units for sale, however, demand and supply remain balanced overall in the area. Affordability, or any lack thereof, does not appear to be a significant obstacle to homebuyers at this juncture in general, although owning a two-storey home at current prices is somewhat of a stretch for many area households. Affordability predominantly improved in the fourth quarter. RBC's measures eased by 0.4 percentage points to 50.8% for two-storey homes and by 0.2 percentage points to 30.6% for condominium apartments. The measure for bungalows was unchanged at 38.8%.

## 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

Region	Average Price			Qualifying Income (\$) Q4 2013	RBC Housing Affordability Measure			
	Q4 2013 (\$)	Q/Q % ch.	Y/Y % ch.		Q4 2013 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	379,800	0.1	4.0	80,900	43.1	-0.2	1.0	39.1
British Columbia	616,100	-1.3	1.9	119,400	67.7	-1.4	1.0	50.4
Alberta	379,700	1.1	6.1	80,700	32.7	-0.2	1.0	35.1
Saskatchewan	351,500	-0.5	0.4	75,500	37.0	-0.2	-0.5	36.0
Manitoba	308,500	-1.1	1.9	68,600	38.0	-0.6	0.8	35.7
Ontario	411,200	0.6	5.5	88,600	44.7	-0.1	1.6	40.2
Quebec	251,200	0.4	2.6	56,600	34.3	0.0	0.7	33.3
Atlantic	220,900	-0.9	1.9	53,000	31.6	-0.1	0.4	31.7
Toronto	583,500	0.9	7.0	118,800	55.6	0.1	2.7	48.6
Montreal	297,700	0.6	2.9	65,600	38.8	0.0	0.8	36.9
Vancouver	807,000	-2.1	3.1	152,700	81.6	-2.3	2.0	59.9
Ottawa	396,400	-0.8	2.4	90,200	36.7	-0.4	0.5	36.4
Calgary	469,000	0.8	6.4	94,500	33.8	-0.2	1.2	38.6
Edmonton	347,700	2.3	4.5	76,600	33.3	0.1	0.7	33.3

### Standard two-storey

Region	Average Price			Qualifying Income (\$) Q4 2013	RBC Housing Affordability Measure			
	Q4 2013 (\$)	Q/Q % ch.	Y/Y % ch.		Q4 2013 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	425,800	0.1	2.9	91,400	48.7	-0.2	0.8	43.6
British Columbia	662,900	-0.6	0.5	129,100	73.2	-1.0	0.2	55.6
Alberta	391,800	0.4	3.4	85,600	34.6	-0.5	0.3	37.7
Saskatchewan	375,300	-3.2	-1.1	81,900	40.1	-1.1	-1.0	37.4
Manitoba	310,500	-2.6	2.5	69,700	38.6	-1.1	1.1	36.6
Ontario	460,400	0.6	4.0	99,800	50.3	-0.1	1.2	43.9
Quebec	323,500	1.1	4.1	71,900	43.6	0.2	1.4	39.9
Atlantic	243,500	-3.0	0.7	60,400	36.0	-0.6	0.2	37.9
Toronto	662,500	0.9	3.4	136,100	63.7	0.2	1.4	54.2
Montreal	399,300	-0.3	5.8	86,000	50.8	-0.4	2.1	42.4
Vancouver	845,600	-1.1	1.5	160,900	86.0	-1.6	1.0	65.1
Ottawa	403,900	-1.0	2.2	94,200	38.4	-0.4	0.5	38.6
Calgary	461,100	0.8	6.1	95,600	34.2	-0.3	1.1	39.1
Edmonton	375,200	0.2	1.7	84,000	36.5	-0.5	0.0	36.6

### Standard condominium

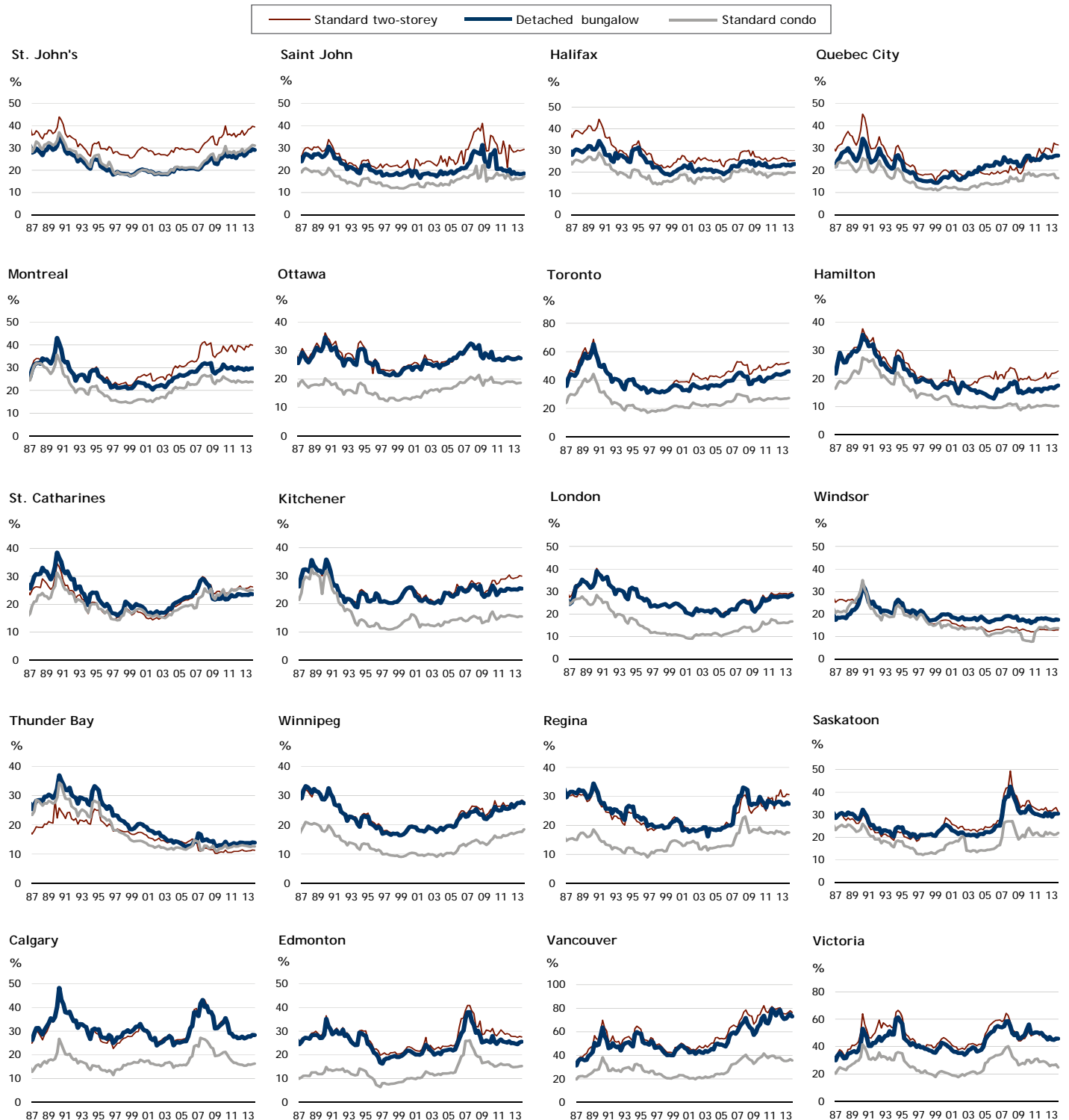
Region	Average Price			Qualifying Income (\$) Q4 2013	RBC Housing Affordability Measure			
	Q4 2013 (\$)	Q/Q % ch.	Y/Y % ch.		Q4 2013 (%)	Q/Q Ppt. ch.	Y/Y Ppt. ch.	Avg. since '85 (%)
Canada*	240,700	0.4	1.6	52,600	28.0	-0.1	0.2	27.0
British Columbia	296,000	-2.7	0.8	59,400	33.7	-1.1	0.2	28.4
Alberta	224,000	2.4	5.0	49,100	19.9	0.1	0.5	21.6
Saskatchewan	241,500	2.2	1.1	52,000	25.5	0.4	-0.2	24.0
Manitoba	207,600	5.5	7.2	45,000	24.9	0.8	1.5	21.2
Ontario	264,800	0.9	2.4	58,500	29.5	0.0	0.3	27.6
Quebec	195,700	0.1	-2.4	44,000	26.7	0.0	-0.4	27.7
Atlantic	189,700	0.6	3.8	44,100	26.3	0.2	0.7	24.5
Toronto	344,200	1.4	3.5	72,500	33.9	0.2	0.7	31.2
Montreal	237,200	-0.2	-0.1	51,800	30.6	-0.2	-0.1	29.5
Vancouver	395,200	-1.9	1.6	76,600	41.0	-1.0	0.5	32.8
Ottawa	271,300	0.6	-1.2	61,600	25.1	0.0	-0.3	23.4
Calgary	269,800	2.5	7.9	55,900	20.0	0.1	0.9	22.3
Edmonton	208,200	1.8	5.6	46,700	20.3	0.0	0.5	18.2

\* 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.

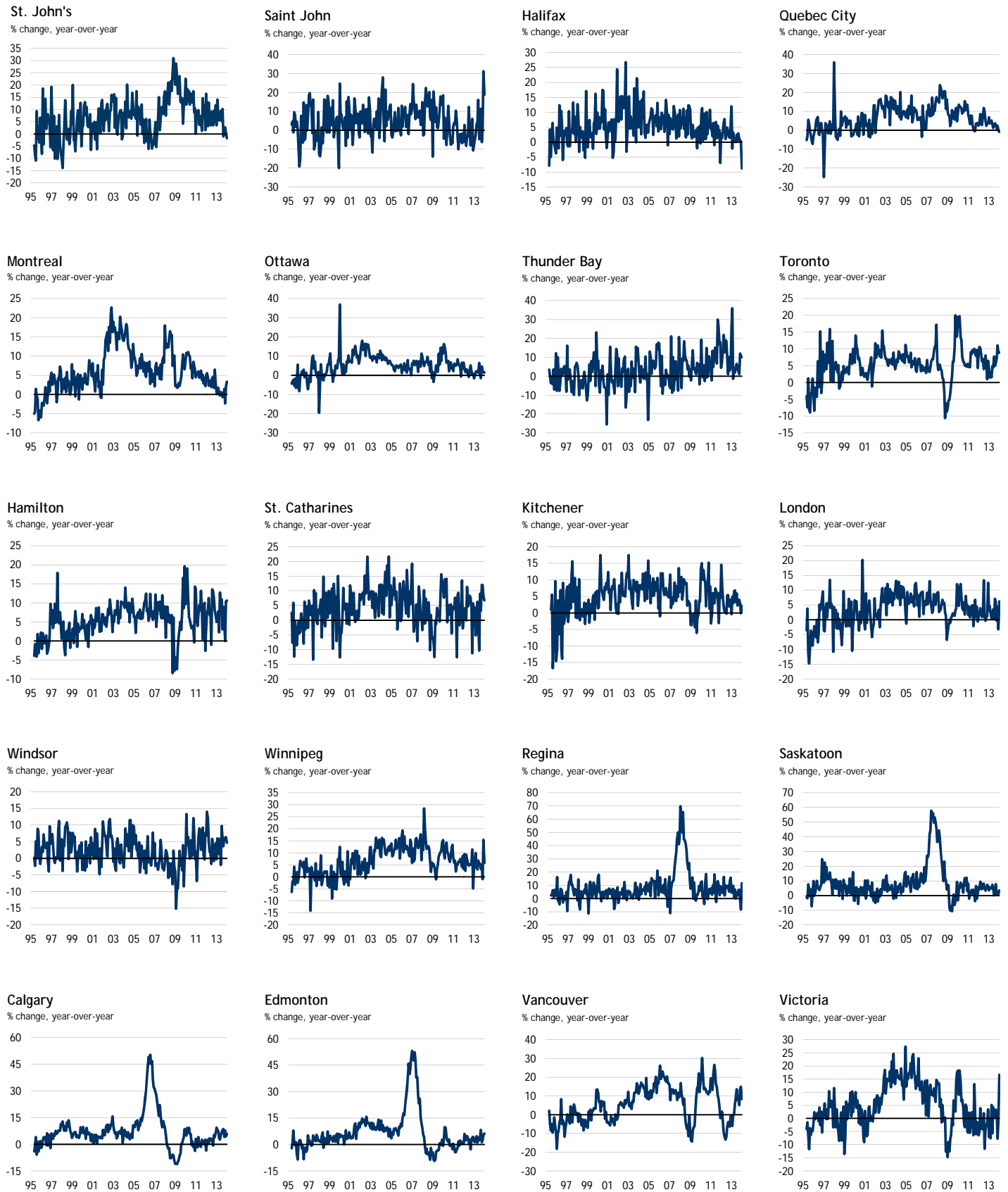


Source: Statistics Canada, Royal LePage, RBC Economics Research





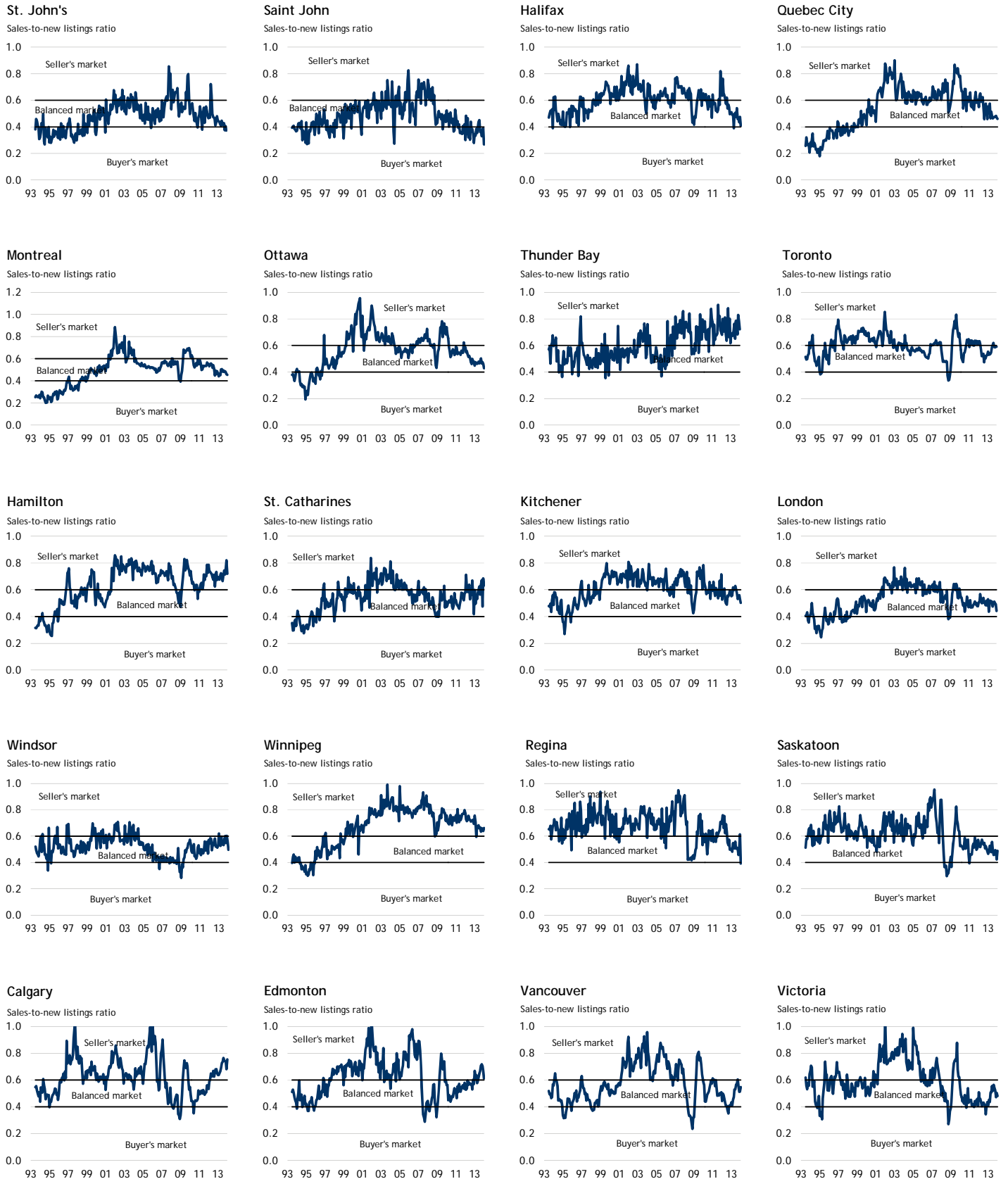
# Average price of homes sold on the MLS system



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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