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Research Briefing | North America
Affordable housing will get increasingly harder to find

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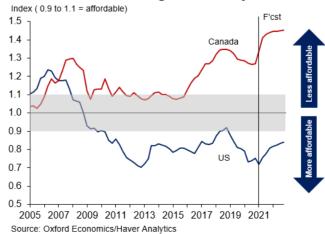Tony Stillo
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- Our new North America Housing Affordability Indices (HAIs) show affordability improved across the region early in the pandemic but will fall as home price inflation outpaces income growth and rising mortgage rates limit borrowing capacity. Our HAIs provide a consistent, cross-country framework for gauging affordability in the US and Canada at the national, regional, and local levels.

- Of the 25 North American metros for which we've built HAIs, Toronto, Vancouver (BC), Hamilton (Ontario), San Jose (CA), and Los Angeles are North America's five least affordable metros. Conversely, Chicago, Columbus (OH), Quebec City, Atlanta, and Raleigh (NC) are the five most affordable.

- Our US national HAI reached 0.66 in Q1 2021, meaning the median single-family home price was 34% below what the median income household could afford. But the national figure obscures significant regional disparities. The Pacific region is unaffordable and will fall further out of reach. Homes in Los Angeles, San Jose, and Seattle will continue to be the most unaffordable in the US.

- The Southwest and Mountains' burgeoning regional economy will cause its affordability to fall. House prices will rise faster than incomes in Austin (TX), Salt Lake City (UT), and Phoenix. Homes in the South and Midwest, including in Atlanta, Chicago, and Columbus, will stay mostly affordable.

- Our Canadian national HAI rose to 1.34 in Q1 2021, meaning a home was 34% more expensive than the median-income household could afford. Unaffordability is a persistent issue in Toronto and Vancouver, and the recent price surge has served to exacerbate this more than decade-old trend. Hamilton and Ottawa have joined the ranks of Canada's least affordable metros, while homes in the Prairies and Quebec remain within reach of local households.

Figure 1: Housing affordability will fall in the US and Canada in 2021 and 2022

North America: Housing Affordability Indices

Source: Oxford Economics/Haver Analytics

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North American housing markets are on fire

The imbalance in North American housing demand and supply dynamics has worsened since the coronavirus outbreak. A strong pace of US existing home sales and new home sales is outstripping supply, pushing inventories to record lows (**Figure 2**). And a near-record number of new homes already sold are still awaiting construction, further evidence that housing demand is very robust.

These supply-demand imbalances have pushed benchmark prices to historic highs in both the US and Canada. Rebounding incomes have assuaged, but not completely diminished, affordability concerns.

Our new North America Housing Affordability Indices (HAIs) offer a lens into how home affordability dynamics will evolve. Using data from our North American Metro Service, the HAIs measure home prices relative to the median household income at the US national level, for all 50 US states, Washington (DC), and certain major and fast-growing US metros, as well as Canada and its largest metros. Our consistent cross-country methodology means affordability can be compared between both countries. HAI data is available upon request.

US is more affordable than Canada

Our HAIs reveal that housing is, and will remain, much more affordable in the US than in Canada (**Figure 1**). Vancouver, Toronto, Hamilton (Ontario), San Jose, and Los Angeles are the five least affordable metros in our sample of 25 North American metros (**Figure 3**). Conversely, Chicago, Columbus, Quebec City, Atlanta, and Raleigh are the five most affordable (**Figure 3**).
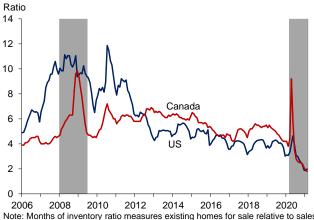
US affordability will be lowest in the Far West

Our national US index reached 0.66 in Q1 2021, meaning the typical home price was 34% lower than what the median income household could afford. But affordability will fall, with the index rising to 0.77 by end-2022, meaning prices will be only 23% lower than incomes (**Figure 4**).

Importantly, the national figure obscures significant regional disparities. Affordability will be highly constrained in Pacific states (**Figure 4**). Income growth on the West Coast won't keep up with home price inflation, putting homes more out of reach for potential buyers. California will become even more unaffordable (**Figure 5**). The Golden State's HAI will rise from 1.06 in Q1 2021 (home price 6% above income) to 1.21 in Q4 2022 (home price 21% above income).

Figure 2: Housing demand is meaningfully outpacing the stock of homes for sale

North America: Months of inventory

Note: Months of inventory ratio measures existing homes for sale relative to sales
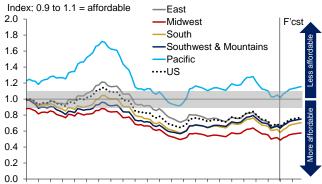Source: Oxford Economics/Haver Analytics

Figure 3: Housing is least affordable in Vancouver, Toronto, and several US West Coast metros

Ranking North American metros by housing affordability			
Most affordable		Least affordable	
City	HAI (Q1 2021)	City	HAI (Q1 2021)
Chicago	0.60	Vancouver	1.67
Columbus	0.62	Toronto	1.53
Quebec City	0.64	Hamilton	1.50
Atlanta	0.65	San Jose	1.49
Raleigh	0.67	LA	1.40
Edmonton	0.67	Ottawa	1.29
Dallas	0.67	Seattle	1.06
Winnipeg	0.68	NYC	1.00
Nashville	0.76	Montreal	1.00
Calgary	0.78	Miami	0.99

Note: Ranking based on the 25 North American metros for which we constructed HAIs
Source: Oxford Economics/Haver Analytics

Figure 4: Housing affordability will decline across all US regions in 2021 and 2022

US: Housing Affordability Indices

Note: Assumes 20% downpayment on a median home purchase price, 25% mortgage payment-to-income ratio, 30-year mortgage rate and 30-year amortization period. National and regional HAIs are population-weighted.
Source: Oxford Economics/Haver Analytics

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In fact, affordability will be lower in the Golden State than all other US states (except Hawaii), including the most populated ones (**Figure 11**). San Jose and Los Angeles will continue to have among the most unaffordable housing (**Figure 6 and 12**). Washington and Oregon will face less pressure than California, but affordability will fall there too. Their HAIs will each rise from about 0.9 to 1 by Q4 2022. Robust GDP and job growth in Seattle (**Figure 6**) and Portland (OR) will raise prices faster than incomes.

Rising stress in the Southwest and Mountains

Southwest and Mountains states experienced a migration influx in recent years as people sought cheaper housing, a lower cost of living, and healthier lifestyles, while businesses desired less expensive alternatives to major coastal metros. These factors drove robust regional growth, and our recent research found that Covid exacerbated regional housing stress. Our HAIs reveal a decline in these regions' affordability, and we expect it to deteriorate further ahead.

Affordability in Austin, Salt Lake City, and Phoenix – metros that have seen strong growth in recent years – will deteriorate (**Figure 6**). Austin will be at the forefront of the subnational economic growth charge, but its rapidly expanding economy will reduce its housing affordability advantage. By Q4 2022, prices in Austin will be about in line with what local incomes can afford (**Figure 13**). Salt Lake City's thriving economy will continue expanding rapidly – thanks to increases in fast-growing business services, financial services, and information sectors. But home prices will be about in line with incomes by end-2022. Salt Lake City's HAI will rise to just under 1 by Q4 2022. Concurrently, inward migration from California and healthy contributions from the finance and real estate sectors will keep Phoenix growing strongly, but local house price and income dynamics will lift its HAI from 0.75 in Q1 2021 to 0.9 by Q4 2022.
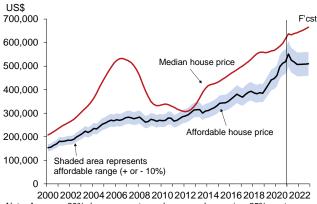
NYC metro will fall out of reach

We also expect affordability to fall in the Big Apple metro area in 2021 and 2022 (**Figure 14**). Better health conditions and reopenings will push demand and home prices higher and at a faster rate than income gains as the local economy recovers from the Covid shock.

The major metros of Atlanta and Dallas will also face headwinds, but they'll stay more affordable than other metros (**Figure 6**). Both will enjoy solid economic growth, but forecasted home prices won't greatly outpace incomes.

Figure 5: California home prices will further outstrip the median household income
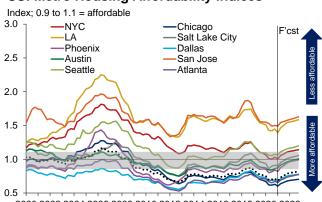
California: Maximum affordable house price

Note: Assumes 20% downpayment on a home purchase price, 25% mortgage payment-to-income ratio, 30-year mortgage rate and 30-year amortization period
Source: Oxford Economics/Haver Analytics

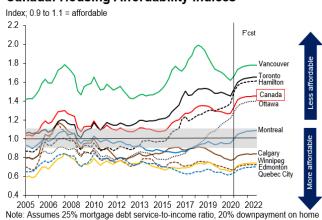**Figure 6: West Coast metros will become less affordable in the near term**

US: Metro Housing Affordability Indices

Note: Assumes 20% downpayment on a median home purchase price, 25% mortgage payment-to-income ratio, 30-year mortgage rate and 30-year amortization period
Source: Oxford Economics/Haver Analytics

Figure 7: Homes have become increasingly out of reach in Canada's largest metros

Canada: Housing Affordability Indices

Note: Assumes 25% mortgage debt service-to-income ratio, 20% downpayment on home purchase price, 5-year mortgage rate and 30-year amortization period
Source: Oxford Economics/Haver Analytics

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Housing has become unaffordable in Canada

Canadian housing affordability has worsened considerably over the past decade, not only in Toronto and Vancouver, but also in several smaller metros (**Figure 7 and 8**). Nationally, our index reached 1.34 in Q1 2021, meaning the typical home in Canada was 34% higher than what the median income household could afford. The index has risen about 5ppts over the past year, as sharply higher prices were only partially offset by historically low mortgage rates and modest income gains.

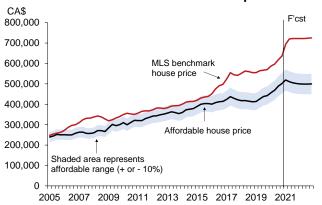## Vancouver and Toronto are far out of reach

Our Vancouver index was 1.67 in Q1 2021, down from its peak of nearly 2 in 2018, but still the most unaffordable market in the country (**Figure 9**). In Ontario's major metros, affordability has worsened considerably over the past decade. Toronto's index reached an all-time high of 1.53 in Q1 2021, while Hamilton, a smaller nearby metro, saw its index jump to 1.5 in Q1 2021, putting it among Canada's most unaffordable metros. Sharply higher prices over the past year raised Ottawa's index to a record 1.29 in Q1 2021, also pushing it well into unaffordable territory.

In the Prairies, homes are comparatively more affordable and well within reach of local median income households. As of Q1 2021, Calgary's index sat at 0.78, while Edmonton and Winnipeg were even more affordable, at 0.67 and 0.68, respectively. Our analysis suggests Quebec is also affordable, with the index for Montreal sitting at 1 and Quebec City at 0.64 in Q1 2021.

We have also constructed a separate, Canada-specific index to better capture domestic household borrowing capacity limits. In Canada, most lenders use a 39% gross debt service ratio to qualify borrowers, and mortgages typically have a 25-year amortization period, the maximum term for Canada Mortgage and Housing Corporation insurance. With these assumptions, housing is much more affordable, but the index still rose above the affordability range to 1.13 in Q1 2021 (**Figure 10**). Notably, this measure is more comparable to our previous work on housing affordability in Canada, when we concluded that housing was largely affordable at the national level.[1]

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[1] The index presented here uses median household income and the MLS benchmark home price, different from our previous work using average home prices and average family income.
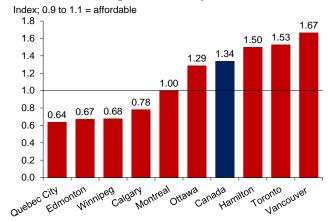
Figure 8: At the national level, homes in Canada have become more unaffordable

Note: Assumes 20% downpayment on a home purchase price, 25% mortgage payment-to-income ratio, 5-year mortgage rate and 30-year amortization period
Source: Oxford Economics/Haver Analytics

Figure 9: Vancouver is the most unaffordable, while Quebec City is the most affordable
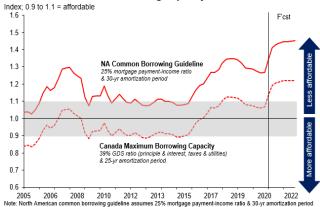

Source: Oxford Economics/Haver Analytics

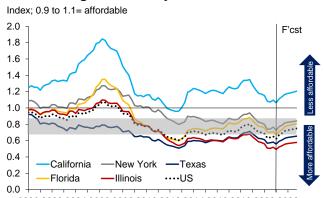**Figure 10: Using Canada-specific assumptions, homes are more affordable**

Note: North American common borrowing guideline assumes 25% mortgage payment-income ratio & 30-yr amortization period while Canada maximum borrowing capacity assumes 39% GDS ratio (principle, interest, taxes & utilities) & 25-yr amortization period. Both assume similar 20% downpayment on home purchase price and 5-year mortgage rate
Source: Oxford Economics/Haver Analytics

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Figure 11: California will continue to face significant affordability challenges

US: Housing Affordability Indices

Index; 0.9 to 1.1= affordable

Note: Assumes 20% downpayment on a home purchase price, 25% mortgage payment-to-income ratio, 30-year mortgage rate and 30-year amortization period
Source: Oxford Economics/Haver Analytics

Figure 12: Chicago, Atlanta, and Dallas are among the most affordable metros currently

US: Metro housing affordability - Q1 2021

Index; 0.9 to 1.1 = affordable

Note: US is population weighted.
Source: Oxford Economics/Haver Analytics

Figure 13: Austin's affordability edge will deteriorate over coming quarters
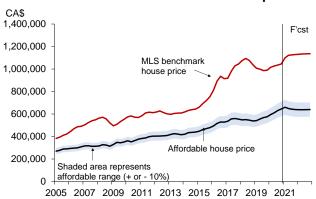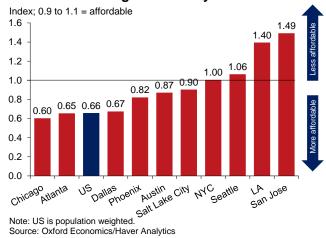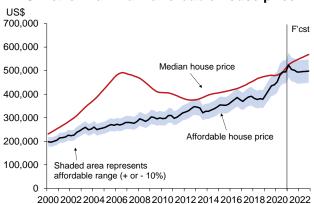
Austin metro: Maximum affordable house price

US$

Note: Assumes 20% downpayment on a home purchase price, 25% mortgage payment-to-income ratio, 30-year mortgage rate and 30-year amortization period
Source: Oxford Economics/Haver Analytics

Figure 14: New York's affordability will drop as its economy reopens

NYC metro: Maximum affordable house price

US$

Note: Assumes 20% downpayment on a home purchase price, 25% mortgage payment-to-income ratio, 30-year mortgage rate and 30-year amortization period
Source: Oxford Economics/Haver Analytics

Figure 15: Vancouver homes are the most unaffordable in North America

Vancouver: Maximum affordable house price

CA$

Note: Assumes 20% downpayment on a home purchase price, 25% mortgage payment-to-income ratio, 5-year mortgage rate and 30-year amortization period
Source: Oxford Economics/Haver Analytics

Figure 16: Toronto homes have become quite unaffordable over the past decade

Toronto: Maximum affordable house price

CA$

Note: Assumes 20% downpayment on a home purchase price, 25% mortgage payment-to-income ratio, 5-year mortgage rate and 30-year amortization period
Source: Oxford Economics/Haver Analytics

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Technical appendix

Our Housing Affordability Indices (HAIs) gauge affordability across North America by comparing whether the median income household can afford the median-priced home.

- **Household income:** Median nominal household income for the US (ACS measure) and Canada, taken from our North American Metro Service.
- **Median home price:** Median nominal, single-family home price. We use nominal prices from Zillow and CREA MLS benchmark prices for the US and Canada, respectively, grown forward using forecasts from our North American Metro Service.
- **Mortgage rates:** We use the 30-year fixed mortgage rate in the US HAIs and the five-year conventional mortgage rate for Canadian HAIs.
- **Amortization period:** We assume a 30-year amortization period for both the US and Canada.
- **Down payment:** We assume a 20% down payment for both the US and Canada.
- **Lending guideline:** We assume mortgage principal and interest payments are 25% of household income based on commonly accepted lending practices, for both the US and Canada.

We have also constructed a Canada-specific index, which assumes a maximum 39% gross debt service (GDS) ratio, the threshold that most Canadian lenders use to qualify borrowers (GDS includes principal, interest, property taxes, and utilities), and a 25-year amortization period for mortgages.

In addition to the national aggregate index, we've constructed HAIs for the following US regions and metros: all 50 states, Washington (DC), and at the metro level, Atlanta, Austin, Chicago, Columbus, Dallas, Denver, Las Vegas, Los Angeles, Miami, Nashville (TN), New York, Phoenix, Raleigh, Salt Lake City, San Jose, and Seattle. For Canada, we've constructed HAIs at the national level, as well as for Calgary, Edmonton, Hamilton, Montreal, Ottawa, Quebec City, Toronto, Vancouver, and Winnipeg. North American HAI data is available to clients upon request.

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