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## Housing Statistics in Canada

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## Acknowledgments

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## Overview

This article examines the aggregate characteristics of residential properties and owner-occupants in high flood hazard areas across census metropolitan areas and census agglomerations in Prince Edward Island, Nova Scotia, New Brunswick, Ontario, Manitoba, Saskatchewan (selected regions), Alberta, British Columbia and Yukon, for the 2022 reference year. It also provides a detailed analysis of four local regions that had significant residential property exposure to flood hazard.

### Key findings

- Higher proportions of residential properties were in high flood hazard (HFH) areas in census metropolitan areas (CMAs) and census agglomerations (CAs) in Manitoba (39.5%), British Columbia (7.1%) and Yukon (5.1%) than in other analyzed jurisdictions.
- Newer constructions—those built from 2016 to 2022—in Manitoba, Saskatchewan and British Columbia were comparatively more likely to be located in HFH areas than those built in prior years.
- The CMAs and CAs of Winnipeg, Chatham-Kent, Chilliwack and Vancouver had significant residential flood hazard exposure, with a large number and share of residential properties located in HFH areas.

## Introduction

Weather-related disasters, which are expected to increase in intensity and frequency because of climate change, can cause damage to Canadian infrastructure and communities (McNally, 2024), as well as economic growth (Dahlhaus et al., 2025). Across Canada, flooding—caused by storm surges, heavy rainfalls, snowmelt or other weather events—is currently the most damaging type of natural disaster (Ness et al., 2025) and is responsible for billions of dollars in property damage and economic disruption each year. For example, Public Safety Canada (2022) estimated the average annual loss from flooding for residential properties across Canada at \$2.9 billion. Beyond their direct financial toll, these events may displace residents, damage housing and disrupt local economies.

In Canada, a significant share of the property stock, and its resident population, is concentrated along river corridors and coastal areas (Kummu et al., 2011). This highlights the need to better understand where residential properties and homeowners are most exposed to flood hazards. Moreover, as governments and developers work to expand the housing supply (Housing, Infrastructure and Communities Canada, 2025), there is a risk that urgency to build or intensify development could lead to increasing housing in areas that are more vulnerable to flooding (Ness et al., 2021; Gourevitch et al., 2023).

This article uses data from the Canadian Housing Statistics Program and Public Safety Canada to provide a profile of residential properties and homeowners located in flood-prone areas. The analysis addresses the need for more disaggregated information to complement existing information that focuses on the financial costs and risks associated with flooding at the national or provincial level (Public Safety Canada, 2022). Although the results

do not account for the mitigating effects of flood defences, they provide a valuable hypothetical scenario of the people and residential properties that would be vulnerable to flood hazards in their absence. Information about the value of such defences acts as an added tool in regions that rely on this vital infrastructure and its continued maintenance.

## Data and methodology

This article focuses on **high flood hazard (HFH) areas**, defined as dissemination blocks (DBs) where 80% or more of the land area overlaps with 100-year return period floodplains.<sup>1</sup> The analysis covers only census metropolitan areas (CMAs) and census agglomerations (CAs)<sup>2</sup> in Prince Edward Island, Nova Scotia, New Brunswick, Ontario, Manitoba, Saskatchewan,<sup>3</sup> Alberta, British Columbia and Yukon.<sup>4</sup> It also excludes reserves, non-residential properties and vacant land.

Residential property and owner data are from the Canadian Housing Statistics Program (CHSP) for the 2022 reference year. The CHSP data provide a unique opportunity to examine a broad set of property and owner attributes, such as period of construction, investment status, owner age group and family income, to characterize the properties and homeowners in flood-susceptible areas.<sup>5</sup>

The CHSP data were linked to flood hazard estimates at the DB level. These customized flood hazard data were produced by Public Safety Canada and were based on the JBA Risk Management Limited Flood Hazard Model (2024). The percentage of the land mass within each DB that overlapped with 100-year return period floodplains was retained and linked to CHSP data by DB. DBs where 80% or more of the land mass overlapped with these floodplains were denoted HFH areas. The model accounted for fluvial, pluvial and coastal flood hazards, but it did not include flood depth considerations, climate change scenarios or flood defences because of missing data at granular levels.<sup>6</sup>

The DB linkage approach identifies properties and homeowners in HFH DBs, rather than identifying hazard exposure at the more specific property or homeowner level. That is, a property or a homeowner located in an HFH area may or may not be located directly on a floodplain. This is because the DB-level flood hazard measure available for this analysis does not indicate exactly where in a DB the hazard existed.<sup>7</sup> Alternatively, measuring the overlap of specific properties and owners with geospatial floodplain data could yield higher shares of vulnerable properties than the shares in HFH areas, particularly in areas where the proportion of a DB's land mass that overlapped with 100-year return period floodplains was only marginally less than the 80% threshold. Despite these differences, and because of limitations when linking to geospatial microdata, the article focuses on properties and owners in HFH areas where large swathes of a DB were prone to flooding.

While this study identifies HFH DBs, these areas may benefit from existing protective measures to mitigate these hazards. Mitigation measures such as floodways, reservoirs, dikes and barriers can have a substantial protective effect against floods, and they can reduce local vulnerability, incentivize development in protected areas and drive building patterns. Care should be taken in interpreting the HFH estimates as representing the actual level of vulnerability in the presence of such protective infrastructure. As a result, in regions with extensive flood defences, the flood hazard measure used in this article could overestimate actual hazard levels. Despite these limitations, this analysis approach helps highlight areas where extreme events such as floods exceeding infrastructure defence capacity, or even infrastructure failure,<sup>8</sup> could cause substantial damage to housing, as evidenced by the dike breach in Sainte-Marthe-sur-le-Lac, Quebec, in 2019 (Bruemmer, 2019).

1. The 80% threshold was selected to focus on locations with a strong presence of flood hazards. Thresholds of 70% and 90% were also considered, and the main findings were robust to these alternative thresholds.
2. This is because the DB linkage approach can be less reliable for larger DBs, which are common outside CMAs or CAs.
3. The estimates for Saskatchewan in this article include only Regina (CMA), Saskatoon (CMA) and Swift Current (CA). The CAs of Lloydminster (Saskatchewan part), Yorkton, Moose Jaw, North Battleford, Prince Albert, Estevan and Weyburn are excluded because a large proportion of properties are missing geolocation information.
4. Newfoundland and Labrador and the Northwest Territories are excluded because they lack the property type information needed to identify non-vacant land properties. Quebec is excluded because the CHSP does not have data for this province. Nunavut is excluded because there are no CMAs or CAs in this territory.
5. CHSP data exclusively cover property owners. Renters were therefore excluded from this analysis.
6. Undefined flood data can be used when flood protection information is absent (Jongman et al., 2014).
7. Depending on the location and land use in a specific area within a given DB, residential properties may have intentionally been built to avoid floodplains or, inversely, may have been deliberately built near the water for use as an amenity. Nevertheless, DBs in urban areas are relatively small. The median land area of a DB is less than 0.03 square kilometres across the CMAs and CAs covered by this analysis, suggesting that the choice of spatial precision would have a minimal impact on this article's overall findings. Moreover, information on specific property-level characteristics (e.g., construction material, stilts) aimed at mitigating flood exposure and damage could be an added consideration, but these data were not available.
8. Infrastructure failure refers to substantial damage to the protected area through breaches, overtopping or other instances where flood mitigation infrastructure is overwhelmed by the hazard.

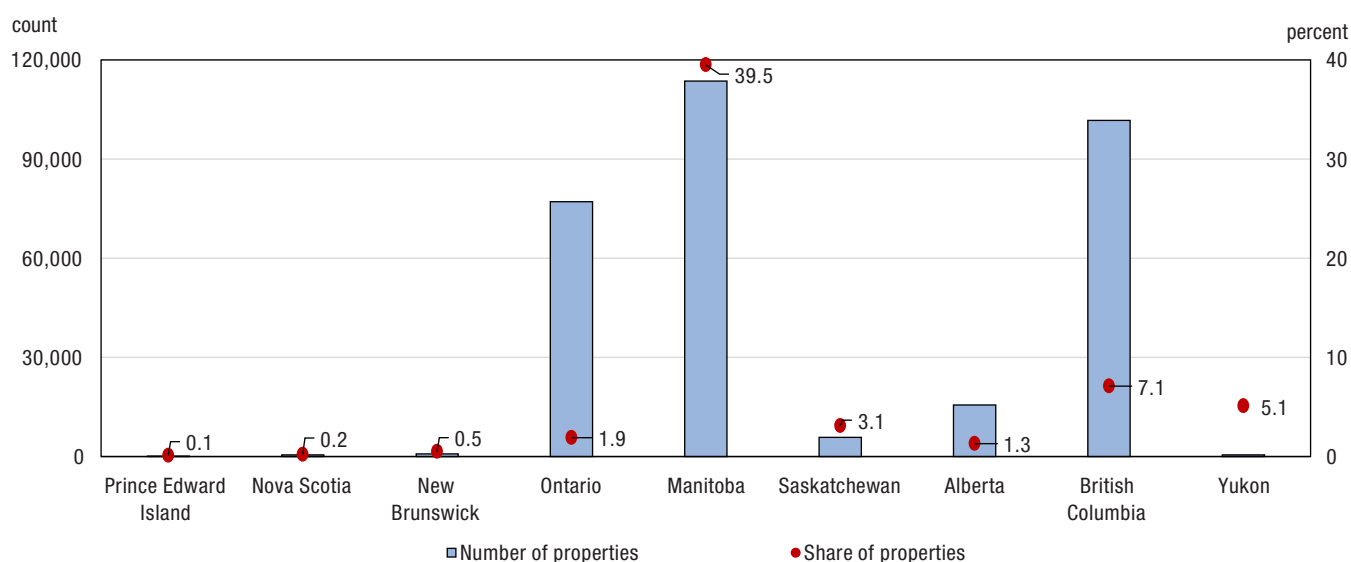
## Manitoba, British Columbia and Yukon have higher proportions of residential properties in high flood hazard areas compared with other provinces and territories

In 2022, Manitoba (39.5%), British Columbia (7.1%) and Yukon (5.1%) had the highest shares of census metropolitan area (CMA) and census agglomeration (CA) properties located in high flood hazard (HFH) areas (Chart 1).<sup>9</sup> In Manitoba, almost all these properties were concentrated in the Winnipeg CMA, which is protected by the Red River Floodway—the largest floodway in Canada. Notably, Manitoba accounted for over one-third of all properties in HFH areas identified in this study.

While there was a smaller share of properties located in HFH areas in CMAs and CAs in Saskatchewan (3.1%), Ontario (1.9%) and Alberta (1.3%), they collectively represented around one in three studied properties in HFH areas across Canada. By comparison, the number and share of properties in HFH areas were significantly lower in the Atlantic provinces.

**Chart 1**

**Number and share of residential properties in census metropolitan areas and census agglomerations in each jurisdiction located in high flood hazard areas, 2022**



**Notes:** The provincial and territorial estimates are based on all census metropolitan areas (CMAs) and census agglomerations (CAs) in the province or territory, except for Saskatchewan, which includes only Regina (CMA), Saskatoon (CMA) and Swift Current (CA). Properties without flood hazard data are excluded from the shares.

**Sources:** Canadian Housing Statistics Program and Public Safety Canada.

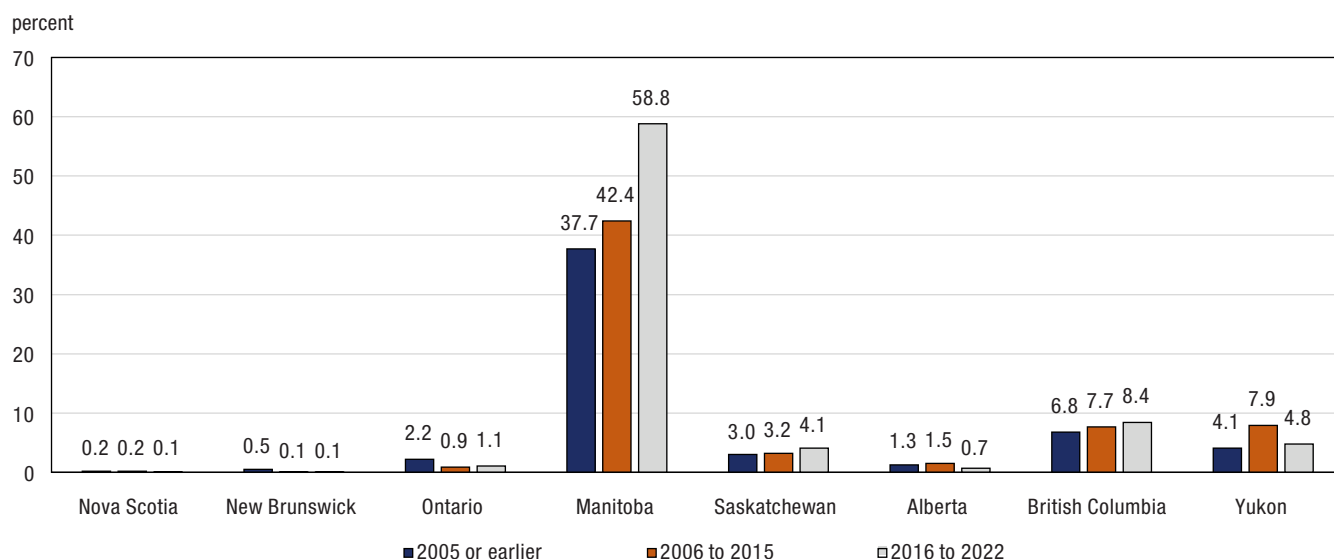
The ongoing housing crisis has intensified pressure to build housing across Canada (Canada Mortgage and Housing Corporation, 2022). In some instances, it may have increased the incentive to build on lower-cost land, including in flood-prone areas (Bakkensen and Ma, 2020).

Chart 2 shows that the proportion of new properties in HFH locations declined in some jurisdictions but increased in others, particularly in Manitoba. In this province, 58.8% of properties built from 2016 to 2022 were located in HFH areas, compared with 37.7% of properties built in 2005 or earlier. A similar trend was observed in British Columbia and Saskatchewan, though the shares of properties built in HFH areas were lower than in Manitoba. By contrast, a smaller share of properties were built in HFH areas from 2016 to 2022 than in 2005 or earlier in the other provinces examined. The different patterns could point to decreased construction in flood-prone areas in some regions, but they could also point to increased construction in the presence of robust mitigation measures in others.

9. This refers to all properties in identified HFH areas, where 80% or more of the land mass of a dissemination block overlapped with 100-year return period floodplains, as opposed to the sum of each property that overlapped with such floodplains.

**Chart 2**

**Share of properties built in high flood hazard areas in census metropolitan areas and census agglomerations by period of construction and jurisdiction, 2022**



**Notes:** The figures shown are properties in high flood hazard (HFH) areas as a proportion of all residential properties by build period. The provincial and territorial estimates are based on all census metropolitan areas (CMAs) and census agglomerations (CAs) in the province or territory, except for Saskatchewan, which includes only Regina (CMA), Saskatoon (CMA) and Swift Current (CA). Prince Edward Island is excluded because of an insufficient number of properties in HFH areas. Properties without flood hazard data or information about the year of construction are excluded.

**Sources:** Canadian Housing Statistics Program and Public Safety Canada.

## Flood vulnerability is primarily a local issue

While provincial- and territorial-level estimates provide insight into the overall level of flood exposure, flood hazards can vary significantly from one area to another. Differences in smaller regions can also be overlooked, given that provincial and territorial estimates often reflect the larger metropolitan areas within that jurisdiction.

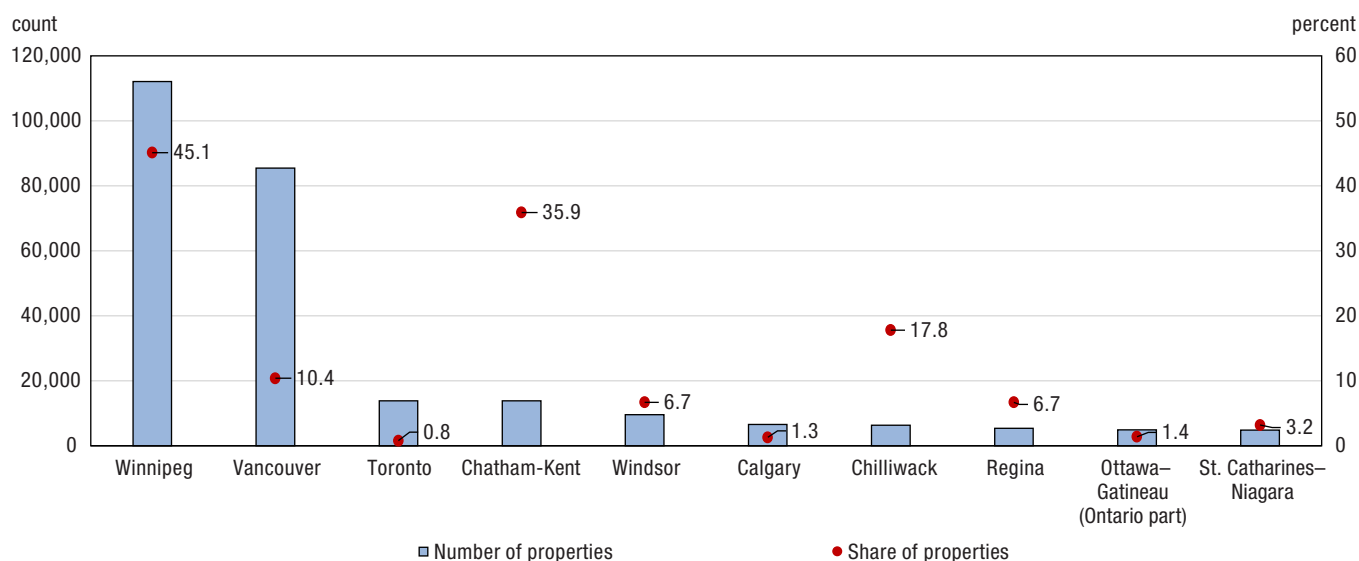
For a more disaggregated analysis, Chart 3 presents the top 10 CMAs and CAs by the number of residential properties located in HFH areas and their relative share of the local property stock. Winnipeg and Vancouver had more properties located in HFH areas than other CMAs and CAs. While Chatham-Kent and Chilliwack had fewer properties in HFH areas in terms of count, these properties represented a relatively large share of their local property stock. The remainder of this article focuses on these four regions,<sup>10</sup> where the properties in HFH areas represented 10% or more of the local property stock, indicating significant residential flood hazard exposure.<sup>11</sup> Results for all studied provinces and territories, including constituent CMAs and CAs, are available in the appendix (Table A.1).

10. Importantly, these four urban areas benefit from a relatively high degree of flood protection through dams, dikes, floodways and other infrastructure. The actual residential flood hazard tends to be lower once these measures are considered. The results presented can be considered to reflect extreme flooding scenarios, thereby highlighting the importance of existing flood infrastructure and its continued maintenance.

11. While regions such as the Toronto and Calgary CMAs had many properties in HFH areas, this was attributable to the large property stock in these areas. These properties represented a relatively small share of the total property stock.

**Chart 3**

**Number and share of properties located in high flood hazard areas, top 10 census metropolitan areas and census agglomerations, 2022**



Sources: Canadian Housing Statistics Program and Public Safety Canada.

## Winnipeg

A total of 112,085 residential properties in the Winnipeg CMA were in HFH areas, representing 45.1% of its residential property stock, the highest among all CMAs and CAs studied. Importantly, the Winnipeg CMA accounted for nearly all (98.7%) of Manitoba's properties located in HFH areas.

To manage these acute flood hazards, Winnipeg relies on extensive flood mitigation measures, including the [Red River Floodway](#), to protect its floodplains. As a result, the actual hazard level in dissemination blocks identified as vulnerable in this study may be lower when such measures are accounted for. Nevertheless, the analysis provides valuable information on the properties and owners that rely on such defences and that would be vulnerable if they were not in place or a hazard exceeded their mitigation capacity.

Over time, the share of new residential properties built in HFH areas has increased in Winnipeg. While 42.4% of properties built in 2005 or earlier were in these areas, properties in HFH areas represented 53.3% of total properties built from 2006 to 2015 and 66.7% of properties built from 2016 to 2022. This, however, does not necessarily imply an issue in urban planning. It may reflect the protective effects of the flood defences in the region that made it safe to develop in once flood-prone areas, which could not be captured by the underlying flood data in this analysis. Overall, the results could indicate the value, including to the newer builds in the region, of ongoing upkeep of and investment in flood infrastructure.

An added consideration could be the types of properties built. Close to four in five residential properties located in HFH areas (82.9%) were houses.<sup>12</sup> These tend to be built with different materials than other types of properties, such as condominium apartments, and may consequently differ in terms of flood damage vulnerability (Huizinga et al., 2017). Such variance across built environments may matter in terms of flood vulnerability assessments and mitigation strategies.

12. The "house" category includes single-detached houses, semi-detached houses, row houses and mobile homes.

## Chatham-Kent

The Chatham-Kent CA had the highest share of residential properties situated in HFH areas in Ontario, at 35.9%, totalling 13,860 properties. Local flood hazards include the Thames River, which bisects the region, and the Sydenham River to the northwest.

Recent construction patterns in Chatham-Kent may suggest a gradual shift away from building in HFH areas, despite continued development. Among residential properties built from 2016 to 2022, 29.4% were in HFH areas, compared with 33.2% of those built from 2006 to 2015 and 36.2% of those built in 2005 or earlier.

The median assessment value of single-detached houses was 13.9% lower in HFH areas than outside these areas. While home price discounts tend to exist for flood hazard areas (Bélanger et al., 2018), the size of the difference could also indicate development patterns where lower-value homes are built in lower-value lands, such as flood-prone areas. Relatively more affordable properties may also have attracted some lower-income homeowners, as suggested by the lower median family income of owner-occupants in HFH areas (-10.5%) than in non-HFH areas in the CA.

## Chilliwack

In the Chilliwack CMA, 6,310 residential properties, representing 17.8% of the property stock, were located in HFH areas. The CMA overlaps with the floodplains of multiple rivers, including the Fraser River and the Vedder River.

Over time, there has been a decline in new residential developments in HFH areas. One in five properties built in 2005 or earlier (20.1%) was in an HFH area, compared with just over one in eight properties built from 2016 to 2022 (12.6%).

Ownership information shows that investment properties comprised a notably higher share of the stock of properties in HFH areas (24.6%), compared with the share in non-HFH areas (18.9%) in the CMA. The majority of these investment properties were likely rental properties, but they could also have been used for other purposes, such as secondary or recreational residences.

## Vancouver

In the Vancouver CMA, 85,405 residential properties, representing 10.4% of the overall property stock, were in HFH areas. The region is vulnerable to Fraser River freshet and coastal flooding (Fraser Basin Council, 2016) but benefits from a wide range of flood mitigation infrastructure, such as dikes, berms and pumping stations.

However, social vulnerabilities to floods remain. Owner-occupants in HFH areas of Vancouver tended to be older and have lower family incomes. Among them, 55.3% were aged 55 or older, compared with 50.8% of owner-occupants in non-HFH areas. Meanwhile, the median family income of owner-occupants in HFH areas was 16.7% lower than that of their counterparts in non-HFH areas. The lower median family income was likely connected to the larger proportion of older owner-occupants in HFH areas, because retirees make up a substantial share of older owners and often have lower income.

Distinct built environments could also lead to differences in flood impacts across regions. Of the residential properties located in HFH areas in Vancouver, 53.8% were houses. This figure was lower than in Winnipeg (82.9%), largely reflecting compositional differences in the built form of residential properties.

## Discussion

The current pressure to build housing across Canada may drive development toward land that has been historically avoided because of flood hazards. Although flood defences have contributed to the protection of housing and other infrastructure in Canada in recent years, continued development in flood-prone areas could mean growing aggregate exposure to disasters. This could have implications on efforts to increase Canada's housing stock, especially in locations where flood defences incentivize residential development and protect its existing housing stock. While many of the HFH areas in this study already have flood defences in place to offset such hazards, these results inform Canadians and policy makers about the owners and residential properties that could be affected in the absence of this crucial infrastructure. The study also highlights the value of continued maintenance—and the potential need for expansion—of these protections.

## Note to readers

The data in this study are compiled from Statistics Canada's Canadian Housing Statistics Program (CHSP) for the 2022 reference year and flood hazard estimates from Public Safety Canada. Complete information about the [reference years of the property stock, by province and territory, is available](#).

This article reports on census metropolitan areas (CMAs) and census agglomerations (CAs) in Prince Edward Island, Nova Scotia, New Brunswick, Ontario, Manitoba, Saskatchewan (the Regina CMA, the Saskatoon CMA and the Swift Current CA only), Alberta, British Columbia and Yukon. It excludes reserves, non-residential properties and vacant land.

Estimates exclude properties and owner-occupants that cannot be linked to flood hazard data, except for the calculation of the share of properties with available flood hazard data in Table A.1.

## Geographical boundaries

In CHSP releases, data are based on the geographical boundaries from the Standard Geographical Classification 2021.

The CHSP database does not contain information about residential properties in Quebec or on reserves.

## Definitions

A **high flood hazard area** refers to a dissemination block where 80% or more of the land area overlaps with the 100-year return period floodplains, based on the JBA Risk Management Limited Flood Hazard Model (2024). The selected model accounts for fluvial, pluvial and coastal flood hazards, but it does not include flood defences.

**Property stock** refers to the stock of residential properties, excluding vacant land properties.

An **owner-occupant** refers to an owner who uses their residential property as a primary place of residence.

An **investment property** refers to a residential property that is owned by at least one investor and is not used as a primary place of residence by any of the owners.

An **investor** is defined as an owner who owns at least one residential property that is not used as their primary place of residence, excluding Canadian non-profit organizations. An individual owner who owns a single property in the same province they reside in is not considered an investor, as long as it is not a property with multiple residential units.

The **"house"** category includes single-detached houses, semi-detached houses, row houses and mobile homes.

## Appendix

**Table A.1**  
Full results by province, territory, census metropolitan area or census agglomeration, 2022

| Geography                            | Share of residential properties in HFH areas |                                     |                                    |                                    | Share of investment properties by location |               | Share of houses by location |               | Relative difference between HFH areas and non-HFH areas |                                         | Share of owner-occupants aged 55 or older by location |               | Coverage                                             |                         |
|--------------------------------------|----------------------------------------------|-------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|---------------|-----------------------------|---------------|---------------------------------------------------------|-----------------------------------------|-------------------------------------------------------|---------------|------------------------------------------------------|-------------------------|
|                                      | Total properties                             | Properties built in 2005 or earlier | Properties built from 2006 to 2015 | Properties built from 2016 to 2022 | HFH areas                                  | Non-HFH areas | HFH areas                   | Non-HFH areas | Median assessment value of single-detached houses       | Median family income of owner-occupants | HFH areas                                             | Non-HFH areas | Share of properties with available flood hazard data | Properties in HFH areas |
|                                      | percent                                      | percent                             | percent                            | percent                            | percent                                    | percent       | percent                     | percent       | percent                                                 | percent                                 | percent                                               | percent       | percent                                              | number                  |
| <b>Nova Scotia</b>                   |                                              |                                     |                                    |                                    |                                            |               |                             |               |                                                         |                                         |                                                       |               |                                                      |                         |
| Nova Scotia (all CMA and CAs)        | 0.2                                          | 0.2                                 | 0.2                                | 0.1                                | 33.0                                       | 18.8          | 76.0                        | 87.6          | -48.6                                                   | -28.6                                   | 60.2                                                  | 53.9          | 99.8                                                 | 495                     |
| Truro (CA)                           | 0.6                                          | 0.6                                 | 0.7                                | 0.0                                | F                                          | 20.9          | F                           | 91.6          | F                                                       | F                                       | F                                                     | 59.2          | 99.7                                                 | 105                     |
| <b>New Brunswick</b>                 |                                              |                                     |                                    |                                    |                                            |               |                             |               |                                                         |                                         |                                                       |               |                                                      |                         |
| New Brunswick (all CMA and CAs)      | 0.5                                          | 0.5                                 | 0.1                                | 0.1                                | 19.0                                       | 13.4          | 83.8                        | 88.3          | -19.8                                                   | -5.0                                    | 60.8                                                  | 52.2          | 98.9                                                 | 765                     |
| Edmundston (CA)                      | 1.7                                          | 1.8                                 | 3.4                                | F                                  | F                                          | 13.1          | F                           | 87.0          | F                                                       | F                                       | F                                                     | 59.2          | 99.5                                                 | 145                     |
| Campbellton (CA, New Brunswick part) | 0.8                                          | 0.9                                 | 0.0                                | 0.0                                | F                                          | 15.4          | F                           | 87.0          | F                                                       | F                                       | F                                                     | 62.8          | 99.8                                                 | 35                      |
| Fredericton (CMA)                    | 0.7                                          | 0.9                                 | 0.0                                | 0.0                                | 22.0                                       | 12.9          | 77.6                        | 88.8          | F                                                       | 22.7                                    | 56.9                                                  | 49.6          | 98.4                                                 | 245                     |
| Saint John (CMA)                     | 0.6                                          | 0.7                                 | 0.1                                | 0.4                                | 17.3                                       | 13.0          | 83.0                        | 86.6          | -45.2                                                   | -38.1                                   | 54.5                                                  | 54.0          | 98.4                                                 | 260                     |
| <b>Ontario</b>                       |                                              |                                     |                                    |                                    |                                            |               |                             |               |                                                         |                                         |                                                       |               |                                                      |                         |
| Ontario (all CMA and CAs)            | 1.9                                          | 2.2                                 | 0.9                                | 1.1                                | 23.2                                       | 18.5          | 80.4                        | 82.1          | -50.2                                                   | -12.5                                   | 55.9                                                  | 50.9          | 99.5                                                 | 77,075                  |
| Chatham-Kent (CA)                    | 35.9                                         | 36.2                                | 33.2                               | 29.4                               | 20.4                                       | 18.5          | 89.0                        | 91.2          | -13.9                                                   | -10.5                                   | 59.9                                                  | 60.5          | 97.6                                                 | 13,860                  |
| Sault Ste. Marie (CA)                | 17.1                                         | 17.8                                | 5.3                                | 4.3                                | 17.8                                       | 14.4          | 83.4                        | 93.4          | -10.0                                                   | -9.5                                    | 61.3                                                  | 60.1          | 99.5                                                 | 4,760                   |
| Timmins (CA)                         | 16.4                                         | 16.7                                | 7.3                                | F                                  | 8.9                                        | 19.3          | 96.1                        | 84.1          | 15.4                                                    | 0.0                                     | 50.5                                                  | 48.9          | 98.4                                                 | 2,305                   |
| Wasaga Beach (CA)                    | 15.7                                         | 18.9                                | 5.4                                | 9.8                                | 60.2                                       | 27.3          | 92.6                        | 96.2          | -6.6                                                    | 0.0                                     | 72.3                                                  | 68.6          | 99.6                                                 | 1,835                   |
| Collingwood (CA)                     | 14.0                                         | 16.0                                | 9.5                                | 9.8                                | 25.9                                       | 30.7          | 93.0                        | 90.6          | -21.0                                                   | -4.5                                    | 62.4                                                  | 65.7          | 99.7                                                 | 1,640                   |
| Orillia (CA)                         | 9.5                                          | 10.1                                | 13.4                               | 0.9                                | 19.2                                       | 20.7          | 96.7                        | 87.0          | 3.8                                                     | 5.3                                     | 63.0                                                  | 60.5          | 99.9                                                 | 1,070                   |
| Sarnia (CA)                          | 8.6                                          | 8.2                                 | 13.8                               | 9.2                                | 17.0                                       | 18.7          | 95.1                        | 91.7          | 13.7                                                    | 4.3                                     | 61.6                                                  | 57.7          | 99.0                                                 | 3,140                   |
| Windsor (CMA)                        | 6.7                                          | 6.8                                 | 4.4                                | 8.5                                | 21.6                                       | 17.9          | 85.1                        | 89.6          | -2.5                                                    | -4.8                                    | 57.3                                                  | 54.3          | 98.6                                                 | 9,620                   |
| Norfolk (CA)                         | 4.9                                          | 5.2                                 | 3.0                                | 3.6                                | 69.1                                       | 16.5          | 91.5                        | 91.8          | 31.0                                                    | 0.0                                     | 75.6                                                  | 62.9          | 93.6                                                 | 1,245                   |
| Thunder Bay (CMA)                    | 4.1                                          | 4.4                                 | 1.1                                | 0.6                                | 12.3                                       | 16.4          | 95.2                        | 90.3          | 0.4                                                     | -4.5                                    | 59.7                                                  | 57.5          | 99.8                                                 | 1,870                   |
| Brantford (CMA)                      | 3.8                                          | 4.0                                 | 2.4                                | 3.1                                | 19.7                                       | 14.5          | 88.6                        | 92.5          | -34.8                                                   | -22.7                                   | 50.6                                                  | 51.3          | 99.7                                                 | 1,750                   |
| Greater Sudbury (CMA)                | 3.5                                          | 3.6                                 | 3.7                                | 1.8                                | 9.6                                        | 15.2          | 93.8                        | 91.3          | -5.4                                                    | 0.0                                     | 49.4                                                  | 53.2          | 97.6                                                 | 1,925                   |
| St. Catharines–Niagara (CMA)         | 3.2                                          | 3.2                                 | 3.0                                | 2.6                                | 17.5                                       | 19.0          | 91.1                        | 91.2          | -5.9                                                    | -10.0                                   | 59.9                                                  | 59.2          | 99.4                                                 | 4,850                   |
| Hawkesbury (CA, Ontario part)        | 3.0                                          | 3.3                                 | 0.0                                | F                                  | F                                          | 26.0          | F                           | 75.5          | F                                                       | F                                       | F                                                     | 69.4          | 100.0                                                | 110                     |
| Cornwall (CA)                        | 1.7                                          | 1.9                                 | 0.4                                | 0.0                                | 22.2                                       | 21.6          | 87.3                        | 84.2          | -21.1                                                   | -16.7                                   | 60.0                                                  | 62.1          | 99.4                                                 | 355                     |
| Hamilton (CMA)                       | 1.7                                          | 1.9                                 | 0.3                                | 0.4                                | 17.9                                       | 15.1          | 92.4                        | 88.4          | -35.7                                                   | -16.0                                   | 52.8                                                  | 51.2          | 99.9                                                 | 4,155                   |
| Essa (CA)                            | 1.6                                          | 2.5                                 | 0.0                                | 0.0                                | F                                          | 9.7           | F                           | 98.3          | F                                                       | F                                       | F                                                     | 42.7          | 98.0                                                 | 110                     |
| Ottawa–Gatineau (CMA, Ontario part)  | 1.4                                          | 1.2                                 | 1.8                                | 2.2                                | 24.4                                       | 17.5          | 65.5                        | 86.9          | 9.1                                                     | 0.0                                     | 50.6                                                  | 49.9          | 99.6                                                 | 4,920                   |
| Barrie (CMA)                         | 1.4                                          | 1.6                                 | 0.6                                | 0.4                                | 37.8                                       | 19.3          | 89.8                        | 91.4          | -10.3                                                   | -13.0                                   | 51.5                                                  | 45.9          | 99.8                                                 | 975                     |
| North Bay (CA)                       | 1.2                                          | 1.3                                 | 0.3                                | 0.9                                | 27.9                                       | 20.3          | 83.6                        | 90.9          | -27.7                                                   | -19.0                                   | 52.5                                                  | 57.9          | 95.8                                                 | 300                     |
| Toronto (CMA)                        | 0.8                                          | 0.9                                 | 0.5                                | 0.5                                | 27.7                                       | 18.5          | 48.7                        | 74.5          | -20.8                                                   | -8.0                                    | 48.7                                                  | 49.1          | 99.8                                                 | 13,865                  |
| London (CMA)                         | 0.6                                          | 0.7                                 | 0.0                                | 0.0                                | 40.0                                       | 28.8          | 72.9                        | 78.7          | -21.7                                                   | -18.2                                   | 53.3                                                  | 52.0          | 99.7                                                 | 1,150                   |

**Table A.1**  
**Full results by province, territory, census metropolitan area or census agglomeration, 2022**

| Geography                            | Share of residential properties in HFH areas |                                     |                                    |                                    | Share of investment properties by location |               | Share of houses by location |               | Relative difference between HFH areas and non-HFH areas |                                         | Share of owner-occupants aged 55 or older by location |               | Coverage                                             |                         |
|--------------------------------------|----------------------------------------------|-------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|---------------|-----------------------------|---------------|---------------------------------------------------------|-----------------------------------------|-------------------------------------------------------|---------------|------------------------------------------------------|-------------------------|
|                                      | Total properties                             | Properties built in 2005 or earlier | Properties built from 2006 to 2015 | Properties built from 2016 to 2022 | HFH areas                                  | Non-HFH areas | HFH areas                   | Non-HFH areas | Median assessment value of single-detached houses       | Median family income of owner-occupants | HFH areas                                             | Non-HFH areas | Share of properties with available flood hazard data | Properties in HFH areas |
|                                      | percent                                      | percent                             | percent                            | percent                            | percent                                    | percent       | percent                     | percent       | percent                                                 | percent                                 | percent                                               | percent       | percent                                              | number                  |
| Owen Sound (CA)                      | 0.6                                          | 0.7                                 | 0.8                                | 0.0                                | F                                          | 19.2          | F                           | 90.2          | F                                                       | F                                       | F                                                     | 62.5          | 96.5                                                 | 75                      |
| Guelph (CMA)                         | 0.5                                          | 0.5                                 | 0.3                                | 0.1                                | 24.5                                       | 16.7          | 93.9                        | 88.9          | -8.7                                                    | -7.7                                    | 42.9                                                  | 47.5          | 99.8                                                 | 240                     |
| <b>Manitoba</b>                      |                                              |                                     |                                    |                                    |                                            |               |                             |               |                                                         |                                         |                                                       |               |                                                      |                         |
| Manitoba (all CMAs and CAs)          | 39.5                                         | 37.7                                | 42.4                               | 58.8                               | 14.1                                       | 13.5          | 83.0                        | 88.5          | 2.4                                                     | 0.0                                     | 46.2                                                  | 47.8          | 99.9                                                 | 113,595                 |
| Winnipeg (CMA)                       | 45.1                                         | 42.4                                | 53.3                               | 66.7                               | 14.0                                       | 12.3          | 82.9                        | 88.2          | -1.6                                                    | -4.3                                    | 46.2                                                  | 48.9          | 99.9                                                 | 112,085                 |
| Winkler (CA)                         | 6.4                                          | 9.2                                 | 1.1                                | 2.5                                | 15.0                                       | 18.8          | 89.8                        | 92.0          | -13.4                                                   | 0.0                                     | 45.9                                                  | 40.7          | 99.7                                                 | 640                     |
| Portage la Prairie (CA)              | 4.4                                          | 3.9                                 | 9.5                                | F                                  | F                                          | 17.4          | F                           | 94.7          | F                                                       | -5.3                                    | 46.5                                                  | 52.0          | 100.0                                                | 195                     |
| Brandon (CA)                         | 4.2                                          | 4.5                                 | 2.9                                | 1.6                                | 18.0                                       | 16.2          | 87.2                        | 87.0          | -17.6                                                   | -18.2                                   | 43.2                                                  | 43.7          | 100.0                                                | 665                     |
| <b>Saskatchewan</b>                  |                                              |                                     |                                    |                                    |                                            |               |                             |               |                                                         |                                         |                                                       |               |                                                      |                         |
| Saskatchewan (selected CMAs and CAs) | 3.1                                          | 3.0                                 | 3.2                                | 4.1                                | ...                                        | ...           | 84.4                        | 85.5          | -21.7                                                   | ...                                     | ...                                                   | ...           | 93.6                                                 | 5,725                   |
| Regina (CMA)                         | 6.7                                          | 6.2                                 | 7.8                                | 11.0                               | ...                                        | ...           | 83.6                        | 87.3          | -17.1                                                   | ...                                     | ...                                                   | ...           | 94.0                                                 | 5,365                   |
| Swift Current (CA)                   | 0.9                                          | 0.9                                 | 0.0                                | F                                  | ...                                        | ...           | F                           | 88.8          | F                                                       | ...                                     | ...                                                   | ...           | 99.9                                                 | 60                      |
| <b>Alberta</b>                       |                                              |                                     |                                    |                                    |                                            |               |                             |               |                                                         |                                         |                                                       |               |                                                      |                         |
| Alberta (all CMAs and CAs)           | 1.3                                          | 1.3                                 | 1.5                                | 0.7                                | ...                                        | ...           | 59.1                        | 84.4          | 1.2                                                     | 0.0                                     | 49.1                                                  | 43.7          | 97.4                                                 | 15,585                  |
| High River (CA)                      | 20.2                                         | 26.1                                | 4.7                                | 16.1                               | ...                                        | ...           | 93.8                        | 98.6          | -10.8                                                   | -10.0                                   | 67.2                                                  | 58.3          | 99.1                                                 | 1,060                   |
| Canmore (CA)                         | 14.4                                         | 14.9                                | 11.0                               | 18.4                               | ...                                        | ...           | 86.8                        | 64.7          | 11.5                                                    | 0.0                                     | 55.6                                                  | 53.2          | 99.3                                                 | 1,180                   |
| Wood Buffalo (CA)                    | 6.3                                          | 1.9                                 | 13.7                               | 5.1                                | ...                                        | ...           | 29.3                        | 87.3          | F                                                       | -15.9                                   | 32.7                                                  | 24.8          | 97.2                                                 | 1,515                   |
| Medicine Hat (CA)                    | 2.7                                          | 2.2                                 | 6.3                                | 2.4                                | ...                                        | ...           | 85.2                        | 88.3          | -20.5                                                   | -14.3                                   | 42.0                                                  | 54.1          | 97.1                                                 | 770                     |
| Okotoks (CA)                         | 1.6                                          | 3.0                                 | 0.1                                | 0.0                                | ...                                        | ...           | F                           | 91.6          | F                                                       | F                                       | F                                                     | 43.4          | 99.6                                                 | 170                     |
| Calgary (CMA)                        | 1.3                                          | 1.2                                 | 1.6                                | 0.9                                | ...                                        | ...           | 46.6                        | 82.2          | 32.4                                                    | 11.5                                    | 45.4                                                  | 43.0          | 95.1                                                 | 6,560                   |
| Red Deer (CMA)                       | 1.0                                          | 1.0                                 | 1.6                                | 0.0                                | ...                                        | ...           | 84.9                        | 87.9          | F                                                       | -17.4                                   | 63.8                                                  | 47.3          | 99.4                                                 | 360                     |
| Edmonton (CMA)                       | 0.8                                          | 1.0                                 | 0.4                                | 0.2                                | ...                                        | ...           | 64.1                        | 84.6          | -6.9                                                    | -4.0                                    | 50.7                                                  | 44.1          | 99.3                                                 | 3,775                   |
| <b>British Columbia</b>              |                                              |                                     |                                    |                                    |                                            |               |                             |               |                                                         |                                         |                                                       |               |                                                      |                         |
| British Columbia (all CMAs and CAs)  | 7.1                                          | 6.8                                 | 7.7                                | 8.4                                | 22.4                                       | 20.5          | 55.9                        | 58.6          | 41.0                                                    | -13.0                                   | 54.9                                                  | 53.9          | 100.0                                                | 101,640                 |
| Squamish (CA)                        | 18.2                                         | 11.5                                | 22.7                               | 32.7                               | 31.8                                       | 26.2          | 45.6                        | 69.9          | -9.8                                                    | -6.9                                    | 25.2                                                  | 31.9          | 99.9                                                 | 1,490                   |
| Chilliwack (CMA)                     | 17.8                                         | 20.1                                | 12.2                               | 12.6                               | 24.6                                       | 18.9          | 73.2                        | 78.6          | -6.9                                                    | -4.8                                    | 50.1                                                  | 51.8          | 100.0                                                | 6,310                   |
| Trail (CA)                           | 11.5                                         | 11.8                                | 4.7                                | F                                  | 17.8                                       | 15.3          | 89.6                        | 92.1          | -12.4                                                   | -5.0                                    | 61.2                                                  | 61.5          | 99.9                                                 | 675                     |
| Vancouver (CMA)                      | 10.4                                         | 10.3                                | 10.5                               | 11.1                               | 21.5                                       | 21.7          | 53.8                        | 47.2          | 4.5                                                     | -16.7                                   | 55.3                                                  | 50.8          | 100.0                                                | 85,405                  |
| Penticton (CA)                       | 5.4                                          | 5.0                                 | 8.5                                | 5.9                                | 29.7                                       | 22.5          | 64.1                        | 73.9          | -17.2                                                   | -15.8                                   | 63.8                                                  | 66.8          | 100.0                                                | 960                     |
| Duncan (CA)                          | 4.1                                          | 5.0                                 | 0.5                                | 0.0                                | 39.4                                       | 14.3          | 51.1                        | 84.3          | -30.9                                                   | -21.1                                   | 62.5                                                  | 67.1          | 100.0                                                | 660                     |
| Prince George (CA)                   | 4.0                                          | 4.3                                 | 0.5                                | 3.4                                | 49.0                                       | 17.5          | 58.4                        | 82.9          | -15.3                                                   | -33.3                                   | 51.0                                                  | 48.7          | 100.0                                                | 1,225                   |
| Port Alberni (CA)                    | 3.9                                          | 3.9                                 | 6.0                                | 2.8                                | 21.8                                       | 17.4          | 85.9                        | 87.7          | -17.8                                                   | -11.1                                   | 65.9                                                  | 64.5          | 100.0                                                | 385                     |
| Kamloops (CMA)                       | 3.5                                          | 4.1                                 | 1.5                                | 1.0                                | 19.2                                       | 20.3          | 56.8                        | 74.2          | -6.6                                                    | -17.4                                   | 62.3                                                  | 52.9          | 100.0                                                | 1,350                   |
| Terrace (CA)                         | 2.4                                          | 2.6                                 | 0.0                                | 0.0                                | F                                          | 20.7          | F                           | 86.2          | F                                                       | F                                       | F                                                     | 51.5          | 100.0                                                | 155                     |
| Kelowna (CMA)                        | 1.4                                          | 1.5                                 | 0.4                                | 2.3                                | 20.8                                       | 21.4          | 62.7                        | 68.1          | 7.0                                                     | 8.7                                     | 57.5                                                  | 56.7          | 100.0                                                | 1,060                   |
| Vernon (CA)                          | 1.3                                          | 1.4                                 | 1.1                                | 0.0                                | 28.3                                       | 21.7          | 73.3                        | 75.3          | F                                                       | -9.5                                    | 57.4                                                  | 62.6          | 100.0                                                | 300                     |
| Victoria (CMA)                       | 0.8                                          | 0.9                                 | 0.8                                | 0.4                                | 31.9                                       | 18.5          | 59.9                        | 58.8          | -1.9                                                    | 8.3                                     | 57.7                                                  | 59.2          | 100.0                                                | 1,035                   |
| Abbotsford–Mission (CMA)             | 0.6                                          | 0.7                                 | 0.3                                | 0.3                                | 16.9                                       | 18.3          | 89.1                        | 58.7          | -31.5                                                   | 0.0                                     | 51.9                                                  | 48.2          | 100.0                                                | 325                     |

**Table A.1**  
**Full results by province, territory, census metropolitan area or census agglomeration, 2022**

| Geography             | Share of residential properties in HFH areas |                                     |                                    |                                    | Share of investment properties by location |               | Share of houses by location |               | Relative difference between HFH areas and non-HFH areas |                                         | Share of owner-occupants aged 55 or older by location |               | Coverage                                             |                         |
|-----------------------|----------------------------------------------|-------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|---------------|-----------------------------|---------------|---------------------------------------------------------|-----------------------------------------|-------------------------------------------------------|---------------|------------------------------------------------------|-------------------------|
|                       | Total properties                             | Properties built in 2005 or earlier | Properties built from 2006 to 2015 | Properties built from 2016 to 2022 | HFH areas                                  | Non-HFH areas | HFH areas                   | Non-HFH areas | Median assessment value of single-detached houses       | Median family income of owner-occupants | HFH areas                                             | Non-HFH areas | Share of properties with available flood hazard data | Properties in HFH areas |
|                       | percent                                      | percent                             | percent                            | percent                            | percent                                    | percent       | percent                     | percent       | percent                                                 | percent                                 | percent                                               | percent       | percent                                              | number                  |
| Parksville (CA)       | 0.6                                          | 0.7                                 | 0.0                                | 1.2                                | F                                          | 12.6          | F                           | 89.4          | F                                                       | F                                       | F                                                     | 82.4          | 100.0                                                | 85                      |
| Campbell River (CA)   | 0.6                                          | 0.6                                 | 0.2                                | 0.0                                | F                                          | 15.1          | F                           | 85.0          | F                                                       | F                                       | F                                                     | 63.0          | 100.0                                                | 85                      |
| Quesnel (CA)          | 0.6                                          | 0.7                                 | 0.0                                | 0.0                                | F                                          | 18.7          | F                           | 90.9          | F                                                       | F                                       | F                                                     | 58.0          | 100.0                                                | 55                      |
| Fort St. John (CA)    | 0.5                                          | 0.6                                 | 0.4                                | 0.0                                | F                                          | 26.1          | F                           | 87.9          | F                                                       | F                                       | F                                                     | 34.1          | 100.0                                                | 50                      |
| <b>Yukon</b>          |                                              |                                     |                                    |                                    |                                            |               |                             |               |                                                         |                                         |                                                       |               |                                                      |                         |
| Yukon (Whitehorse CA) | 5.1                                          | 4.1                                 | 7.9                                | 4.8                                | ...                                        | ...           | 36.7                        | 89.2          | F                                                       | -18.8                                   | 64.7                                                  | 42.7          | 92.4                                                 | 490                     |

... not applicable

F too unreliable to be published

**Notes:** The provincial and territorial estimates are based on all census metropolitan areas (CMAs) and census agglomerations (CAs) in the province or territory, except for Saskatchewan, which includes only Regina (CMA), Saskatoon (CMA) and Swift Current (CA). CMAs and CAs with less than 0.5% of residential properties in high flood hazard (HFH) areas are excluded from this table. Prince Edward Island is excluded because of an insufficient number of properties in HFH areas. Properties and owner-occupants without flood hazard data are excluded except for the share of properties with available flood hazard data. Properties with unknown information about the year of construction, investment status or assessment value and owner-occupants with unknown family income or age are also excluded from the calculation for the respective columns. Assessment and income values of zero were excluded in the calculation of medians. The relative difference between HFH areas and non-HFH areas is calculated

with  $\left( \frac{\text{median in HFH areas}}{\text{median in non-HFH areas}} - 1 \right) \times 100\%$ ; a positive value indicates that the HFH median is higher than the non-HFH median. Shares and relative differences for cells with fewer than 200 underlying observations are suppressed to

ensure reliability.

**Sources:** Canadian Housing Statistics Program and Public Safety Canada.

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