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Abstract

An increase in the number of international students and a greater need for affordable housing have prompted questions about their housing experiences. This article examines the prevalence of living in unsuitable housing for international students enumerated in the 2021 Census of Population long-form questionnaire and provides comparisons with Canadian-born students across municipalities. The results indicated that international students were more likely to live in unsuitable housing than Canadian-born students. However, there was a large variation across municipalities in the proportion of international students living in unsuitable housing. In the top 10 municipalities with the highest number of international students, the rates of living in unsuitable housing ranged from 25% to 63% for international students, about 13 to 45 percentage points higher than that for Canadian-born students aged 18 to 24. Furthermore, there were large disparities in unsuitable housing rates across international student groups from different source countries. Students from India were more likely to live in unsuitable housing compared with those from other countries. In Brampton and Surrey, the municipalities with the largest shares of Indian students, the proportions of international students in unsuitable housing were the highest. The difference in the source-country composition of international students accounted for most of the variation across municipalities in international students' housing suitability.

Canada welcomes a large number of international students¹ each year from various countries, and the number of arrivals has increased over the past two decades (Choi, Crossman & Hou, 2021; Crossman et al., 2022). The increase in the number of international students and a greater need for affordable housing have prompted questions about their housing experiences (Pottie-Sherman et al., 2023). International students have reported difficulties finding affordable and suitable housing because of cultural differences, language barriers, lack of familiarity with the Canadian housing system and regulations, and other obstacles (El Masri & Khan, 2022). As international students may have unique housing experiences, it is important to understand how this population fares in terms of housing conditions (Pottie-Sherman et al., 2023). There may also be geographic differences in the housing conditions of international students across municipalities because of variations in regional housing markets (see Statistics Canada, 2022). Furthermore, international students from different source countries may vary in their financial resources and cultural norms regarding living arrangements.

Using data from the 2021 Census of Population, this article examines the prevalence of living in unsuitable housing² for international students enumerated in the long-form census questionnaire³ and provides comparisons with Canadian-born students⁴ across municipalities (or census subdivisions [CSDs]).⁵ Since the long-form census questionnaire did not collect information for people living in collective dwellings, including school residences, this article covers only international students living in private households. Data are shown separately for the top 10 CSDs with the highest number of international students and the 5 CSDs with the highest proportion of international students by their share of the total population of Canadians.⁶ This article further examines the variation in housing suitability of international students by their source country and whether such variation is associated with differences in international students' housing suitability across municipalities.

Housing suitability of international students in municipalities with the largest number of international students

Toronto, Montréal and Vancouver—Canada's three largest municipalities—had the largest number of international students. In 2021, about 31% of all international students in Canada were concentrated in Toronto (44,670), Montréal (43,430) and Vancouver (17,030) (Table 1). Another 25% of international students were located in the other top 10 municipalities with the largest number of international students. The remaining 44% of international students were scattered across other municipalities.

^{1.} The terms "international students" and "study permit holders" are used interchangeably in this article, and the data reported in the article refer to study permit holders.

^{2.} Housing suitability refers to whether a private household is living in suitable accommodations according to the National Occupancy Standard (NOS). A household is deemed to be living in suitable accommodations if its dwelling has enough bedrooms, as calculated using the NOS. One general criterion of suitable accommodation is a maximum of two people per bedroom. Additionally, non-couple household members aged 18 or over should have a separate bedroom. Other criteria for the suitable number of bedrooms for a household are based on age, sex and relationships among household members.

^{3.} Using data from the 2021 Census of Population, a recent study by Tuey and Bastien (2023) showed 334,350 non-permanent residents enumerated in Canada hold a study permit. Similar to other non-permanent residents, international students are vulnerable to undercounting. Non-permanent residents may be unfamiliar with the census, be reluctant to complete government forms or perceive their participation as voluntary (Tuey & Bastien, 2023).

^{4.} Canadian-born students in this analysis are defined as Canadian-born youth who were aged 18 to 24 and had attended college, trade school, CEGEP or university at any time since September 2020.

^{5. &}quot;Census subdivision" is the general term for municipalities (as determined by provincial and territorial legislation) or areas treated as municipal equivalents for statistical purposes (e.g., Indian reserves, Indian settlements and unorganized territories). Municipal status is defined by laws in effect in each province and territory in Canada.

^{6.} The five CSDs with the highest proportion of international students in their total population exclude Surrey, Montréal and Vancouver, because they are among the top 10 municipalities with the largest number of international students.

Among the top 10 CSDs with the most international students, Brampton (63%) and Surrey (61%) had the largest shares of students living in unsuitable housing, whereas Vancouver (29%) and Calgary (25%) had the lowest. International students were more likely to live in unsuitable housing compared with Canadian-born students across all municipalities. The largest differences were observed for Brampton (about 43 percentage points) and Surrey (about 45 percentage points).

Table 1
Housing characteristics of international students and Canadian-born students in municipalities with the largest number or highest population share of international students, 2021

	Number of study permits	Population share	Not suitable housing (observed)	Not suitable housing (adjusted)	Not suitable housing (observed)		
		International students					
	count	percent	percent	predicted	percent		
				probability ²			
Top 10: Total study permit holders							
Toronto	44,670	1.6	37.2	37.2	24.3		
Montréal	43,430	2.5	34.2	35.8	16.8		
Vancouver	17,030	2.6	29.2	32.5	15.4		
Winnipeg	14,780	2.0	39.8	40.7	10.6		
Brampton	14,770	2.3	63.3	39.6	20.8		
Surrey	14,740	2.6	61.1	40.1	16.6		
Ottawa	11,920	1.2	34.3	39.0	12.4		
Edmonton	9,170	0.9	28.6	30.8	11.8		
London	8,790	2.1	35.3	36.1	12.4		
Calgary	8,780	0.7	24.8	27.6	9.1		
Other municipalities	146,260	0.6	30.5	33.4	9.0		
Top 5: Population share of study permit holders ¹							
Metro Vancouver A	1,960	11.5	17.0	19.3	18.5		
Waterloo	6,370	5.4	25.0	26.4	12.1		
Charlottetown	1,420	3.8	26.9	36.7	6.2		
Burnaby	7,900	3.2	27.7	30.9	14.9		
St. John's	2,570	2.4	20.2	27.6	4.1		
Other municipalities	238,930	0.7	35.0	34.7	11.0		

^{1.} Surrey, Montréal and Vancouver (included in the top 10) were excluded from this analysis. Antigonish, Wolfville and Sainte-Anne-de-Bellevue (fewer than 250 study permit holders) are coded as other municipalities.

Note: Only census subdivisions with a population greater than 2,000 are included. Indian reserves, Tsawwassen Lands and census subdivisions with no study permit holders are excluded.

Source: Statistics Canada, 2021 Census of Population.

As mentioned, international students arrive from many different countries. Table 2 (left panel) shows the percentages of international students born in India and China—the top two source countries—and all other countries by CSD. Brampton and Surrey had the greatest shares of international students from India (91% and 79%, respectively), followed by third-ranking Winnipeg (31%) with a much lower share. Table 2 (right panel) indicates that international students from India were more likely to live in unsuitable housing than those from other countries, regardless of the CSD.

The high observed rates of international students living in unsuitable housing in Brampton and Surrey may be attributable to the compositional characteristics of international students and the municipalities' overall housing conditions. The rates in Brampton and Surrey were similar to those in the top four municipalities with the largest number of international students once the analysis accounted for differences in the gender, age, year of first study permit and country of birth of international students; the

^{2.} Predicted probabilities (multiplied by 100 for ease of interpretation) are based on results from an ordinary least squares regression model that controls for gender, age (continuous), source country (top 20 countries and other), year of first permit, median rent of census subdivision and percentage of total dwellings that are apartments.

CSD median rental cost; and the share of apartments among total dwellings⁷ (Table 1, adjusted). Further decomposition analysis suggests that source country composition accounted for most of the high rates of unsuitable housing in these two CSDs.

Table 2
Prevalence of living in unsuitable housing of international students by municipality and source country

	Percent distribution of source countries by municipality			Unsuitable housing by source country and municipality					
	India	China	Other	India	China	Other			
	percent								
Top 10: Total study permit holders									
Toronto	26.9	22.9	50.2	66.1	16.1	31.3			
Montréal	24.4	9.5	66.1	77.0	19.5	20.6			
Vancouver	14.7	14.2	71.1	53.3	15.1	27.0			
Winnipeg	31.4	16.9	51.7	68.1	13.4	31.2			
Brampton	90.6	0.3	9.1	66.5	x	33.4			
Surrey	79.2	5.7	15.1	69.4	13.7	35.4			
Ottawa	25.9	21.1	53.0	68.6	21.2	22.7			
Edmonton	29.9	21.9	48.3	47.0	18.8	21.6			
London	31.1	19.7	49.2	69.5	7.9	24.6			
Calgary	25.6	14.3	60.1	46.0	12.9	18.6			
Other municipalities	28.3	19.1	52.6	59.5	11.5	21.8			
Top 5: Population share of study permit holders ¹									
Metro Vancouver A	8.7	31.9	59.3	х	19.9	17.5			
Waterloo	35.5	34.9	29.6	42.0	10.9	21.3			
Charlottetown	7.5	18.9	73.6	х	15.1	24.2			
Burnaby	15.6	29.6	54.7	56.6	11.0	28.6			
St. John's	14.2	9.9	75.9	54.9	x	15.7			
Other municipalities	32.7	17.8	49.5	62.8	13.5	24.3			

x suppressed to meet the confidentiality requirements of the Statistics Act

Source: Statistics Canada, 2021 Census of Population.

Housing suitability in the top five municipalities with the highest share of international students in the total population

In the top 10 municipalities where international students were mostly concentrated, their proportion in the total population was generally small, at less than 3%. Because of their small relative population size, their aggregate demand for housing may be smaller in these municipalities than in municipalities where international students accounted for a larger share of the total population. International students' aggregate demand in a local community could be a potential factor affecting their housing conditions. For this reason, this section focuses on the top five municipalities with the highest share of international students.

^{1.} Surrey, Montréal and Vancouver (included in the top 10) were excluded from this analysis. Antigonish, Wolfville and Sainte-Anne-de-Bellevue (fewer than 250 study permit holders) are coded as other municipalities.

^{7.} The CSD median rental cost is included to control for the possibility that renters are more likely to seek shared accommodations in a more expensive rental market. The share of apartments in total dwellings is used as a proxy for rental market type. Landlords of purpose-built rental properties may put more effort in enforcing building occupancy rules than landlords of other rental types. In the regression models, both factors were positively and significantly associated with non-suitable housing. Depending on the model specifications, an increase of \$100 in the CSD median rental cost was associated with a 0.2 to 0.5 percentage point increase in the rate of non-suitable housing among international students. A 10 percentage point increase in the share of apartments in total dwellings was associated with a 1.1 to 1.4 percentage point increase in the rate of non-suitable housing.

All top five CSDs with the highest proportion of international students by total population share contain at least one university. Metro Vancouver A (12%), where the University of British Columbia is located, had the largest share of international students among the CSDs in this category. Waterloo (5%) was ranked second, and Charlottetown (4%) ranked third (Table 1).

Among the top five CSDs, the share of international students living in unsuitable housing ranged from 17% (in Metro Vancouver A) to 28% (in Burnaby). International students in all top five CSDs were less likely to live in unsuitable housing compared with the average of other municipalities outside the top five (35%). However, compared with Canadian-born students, international students were more likely to live in unsuitable housing in four of the top five municipalities. In Metro Vancouver A, international students were slightly less likely to live in non-suitable housing.8

Most international students in the top five CSDs were born in countries other than India or China (Table 2. left panel). One exception was Waterloo, where there were similar proportions of students from India, China and other countries. The shares of international students from India were particularly low in Metro Vancouver A (9%) and Charlottetown (8%). Once the compositional characteristics of students and the municipality's overall housing conditions were accounted for, the adjusted rates of living in unsuitable housing increased for all top five CSDs, especially Charlottetown and St. John's (Table 1, adjusted).

In summary, international students were generally more likely to live in unsuitable housing than Canadian-born students. However, there was a large variation in the proportion of international students living in unsuitable housing across municipalities. Furthermore, there were large disparities in unsuitable housing rates across international student groups from different source countries. Students from India were more likely to live in unsuitable housing compared with those from other countries. In Brampton and Surrey, the municipalities with the largest shares of Indian students, the proportions of international students in unsuitable housing were the highest. The difference in the source-country composition of international students accounted for most of the variation across municipalities in international students' housing suitability.

The findings presented in this article offer a snapshot of housing suitability for international students as of the 2021 Census of Population. It is crucial to note that the international student population has been undergoing rapid changes in terms of overall numbers and sociodemographic characteristics (Crossman et al., 2022). Consequently, the housing conditions for international students may have evolved as well. Notably, after a large increase from 225,000 in 2010 to 638,000 in 2019, the number of international students declined to 527,000 in 2020 because of travel restrictions imposed during the COVID-19 pandemic. The number recovered to 617,000 in 2021 and grew substantially to 804,000 in 2022 and 1,041,000 in 2023 (Immigration, Refugees and Citizenship Canada, n.d.). These dynamic shifts underscore the necessity to keep monitoring the housing circumstances of international students.

^{8.} The CSD of Metro Vancouver A is unique in that 77% of its residential properties were condominiums. The house values were over \$1.8 million for all properties and over \$1.0 million for condominiums in 2021. Furthermore, 16% of the residential properties were owned by non-residents (Statistics Canada, 2023). International students living in this CSD may have more financial resources than the general international student population.

^{9.} Among 656 municipalities, each with a total population exceeding 2,000 and not ranked in the top 15 in Table 1, international students had a relatively high incidence (greater than 40%, averaging 71%) of living in unsuitable housing in 153 of these municipalities. In these municipalities, international students comprised 0.4% of the total population, with 45% of them coming from India. Conversely, in the other 503 municipalities, the average rate of international students residing in unsuitable housing was 9%. Here, international students constituted, on average, 0.3% of the total population, and 16% of these international students came from India.

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References

Choi, Y., Crossman, E., & Hou, F. (2021). <u>International students as a source of labour supply: Retention in their province of study</u>. *Economic and Social Reports*, 1(6), 1-12.

Crossman, E., Choi, Y., Lu, Y., & Hou, F. (2022). <u>International students as a source of labour supply: A summary of recent trends</u>. *Economic and Social Reports*, 2(3), 1-5.

El Masri, A., & Khan, N. (2022). <u>International Students' Lived Experiences: A Review of Literature</u>. *CGEI Resources and Reports*, 1.

Immigration, Refugees and Citizenship Canada. (n.d.). Canada – Study permit holders with a valid permit on December 31st by Province/Territory of intended destination and study level, 2000 – 2023. https://www.ircc.canada.ca/opendata-donneesouvertes/data/EN ODP annual-TR-Study-IS PT study level year end.xlsx. Downloaded February 13, 2024.

Pottie-Sherman, Y., Christensen, J., Foroutan, M., & Zhou, S. 2023. Navigating the housing crisis: A comparison of international students and other newcomers in a mid-sized Canadian city. *Canadian Geographies*, 1–13. https://doi.org/10.1111/cag.12869.

Statistics Canada. (2022). <u>To buy or to rent: The housing market continues to be reshaped by several factors as Canadians search for an affordable place to call home</u>. Statistics Canada Catalogue no. 11-001-X.

Statistics Canada. (2023) Residency ownership and property use by residential property type and period of construction. Accessed December 23, 2023.

Tuey, C., & Bastien, N. (2023). <u>Non-permanent residents in Canada: Portrait of a growing population from the 2021 Census</u>. *Insights on Canadian Society*, 1-18.