The HNA Blueprint

“ALICE” HOUSEHOLDS

Methodology

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TABLE OF CONTENTS

1 OVERVIEW

"Asset Limited, Income Constrained, Employed" (ALICE) is a framework originally developed by the United Way of Northern New Jersey[1] to identify households that fall above the official poverty line but below the income threshold required to meet basic living costs, including housing, food, transportation, childcare, and healthcare. While the framework was designed in a US context (where the Federal Poverty Level serves as the lower bound) the underlying income-gap dynamic translates to Canada, where the Market Basket Measure (MBM) provides an analogous poverty threshold and where a meaningful share of working households similarly earn above that threshold while remaining unable to afford adequate housing without financial stress or trade-offs. These households typically do not qualify for subsidized housing programs designed for those in deepest need, nor are they well-served by income support programs calibrated to households below the poverty line. Understanding the scale of ALICE households provides an improved picture of latent housing demand at below-market price points and helps size the portion of the local workforce for whom market-rate supply, even at modest price levels, remains structurally inaccessible.

The methodology below describes how both thresholds are derived and how they are applied to Census income distribution data to produce the household counts presented in the **Template – Community HNA** document.

2 METHODOLOGY

2.1 Derive the Poverty Line (MBM) Threshold

The poverty threshold is based on the Market Basket Measure (MBM), published annually by Statistics Canada.[2] The MBM defines the income required for a reference family of two adults and two children to afford a basket of goods and services representing a modest standard of living.

Source Data

The relevant expenditure components are extracted by province:

- food,
- clothing,
- transportation,
- shelter,
- communications, and
- other (including the Inuusi supplement where applicable, folded into the “other” category).

As a simplification, these components are then averaged across MBM geographic zones within each province to produce a single provincial estimate per component.

Community-level Adjustments

[1] United Way Northern New Jersey. (2026). ALICE.

[2] Statistics Canada. Table 11-10-0066-01 Market Basket Measure (MBM) thresholds for the reference family by Market Basket Measure region, component and base year. **DOI:** https://doi.org/10.25318/1110006601-eng

The provincial MBM components are adjusted to reflect local housing and transportation costs using Statistics Canada's Housing and Transportation Cost Index.[3] For each Census Subdivision (CSD), an index value is derived relative to the provincial average for both the housing and transportation components. The community-level MBM total is then calculated as:

$$MBM\,(CSD) \;=\; (H \times i_h) \;+\; (T \times i_t) \;+\; other\ expenditures$$

where H and T are the provincial MBM shelter and transportation components, and i_h and i_t are the CSD-level housing and transportation index values expressed relative to the provincial average (i.e., i = *CSD index ÷ provincial average index*). Other expenditures are carried forward unchanged from the provincial estimate.

Where a CSD-level cost index is unavailable (suppressed or absent), the Census Division (CD) average is substituted; where the CD value is also unavailable, the provincial value is used.

Household-Size Scaling

The resulting community-level MBM total is a four-person household equivalent. Following the square-root equivalence scale used by Statistics Canada, per-household thresholds for other household sizes are derived as:

$$MBM(n) \;=\; MBM(4) \;\times\; \sqrt{n} \;\div\; \sqrt{4}$$

This produces poverty line income thresholds for one-, two-, three-, four-, and five-or-more-person households.

2.2 Derive the Living Wage (Upper) Threshold

The living wage threshold represents the gross household income required for a household to meet basic living costs at a standard above subsistence. Provincial living wage estimates are sourced from provincial living wage campaigns and associated household budget models. The six provinces currently incorporated are:

Province	PR code	Source
Newfoundland & Labrador	10	Cerdas Sandi, D.; Saulnier, C. ; and Williams, R. (2025, August). 2025 Living Wages for Newfoundland and Labrador, Nova Scotia and Prince Edward Island. Canadian Centre for Policy Alternatives.
Prince Edward Island	11	
Nova Scotia	12	
Ontario	35	Coleman, A. (2025, December). Calculating Ontario's Living Wage Rates. Ontario Living Wage Network.
Manitoba	46	Harney, N. and Hajer, J. (2025, December). Manitoba Living Wage Update 2025. Canadian Centre for Policy Alternatives.
British Columbia	59	Ivanova, I. and French, A. (2025). Living Wage Report 2025: Calculating what it takes to live in Metro Vancouver. Living Wage BC; BC Policy Solutions; and Vancity Community Foundation.

[3] Statistics Canada. Table 46-10-0090-01 Housing and transportation cost index. **DOI:** https://doi.org/10.25318/4610009001-eng

For each province, the following inputs are recorded: monthly housing costs, monthly transportation costs, total monthly expenditures, the living wage rate (in dollars per hour), and the equivalent gross annual household income.

Community-Level Adjustment
As with the MBM, the provincial living wage household income is adjusted to reflect local housing and transportation costs using the same CSD-level cost indices:

$$LW\,income(CSD) = [(H \times i_h) + (T \times i_t) - H - T + total\ exp] \div total\ exp \times LW\,income(provincial)$$

This formula re-weights the provincial living income by the degree to which local housing and transportation costs diverge from the provincial average, while holding all other expenditure components constant.

Household-Size Scaling
The resulting community-level living income is again a four-person household equivalent. The same square-root equivalence scale is applied to derive thresholds for all household sizes.

2.3 Apply Thresholds to Census Income Distributions

Household counts below the poverty line and below the living wage threshold are estimated by applying the income thresholds derived in Steps 1 and 2 to the Census household income distribution.

Source Data
Census household income distributions are sourced from Statistics Canada as a custom tabulation of the 2021 Census. The data was parsed to extract lower and upper bounds for each available $5,000 income bracket (up to $150,000). Distributions are available for one, two, three, four, and five-or-more-person households.

Suppression Handling
Where a CSD's income distribution contains more than 50% zero-valued cells across non-header rows (indicating suppressed data), the CSD distribution is replaced by the parent Census Division (CD) distribution for all household size categories. This CD fallback is applied uniformly across all income brackets for the affected CSD, and is flagged in a source column for quality assurance purposes.

Threshold Interpolation
For each household size, the estimated number of households below a given income threshold (MBM or living wage) is calculated by interpolating across income brackets. Specifically, the cumulative household count at the threshold value is derived from the income bracket in which the threshold falls, using a proportional allocation within that bracket. Counts are accumulated across all brackets below the threshold.

ALICE Band Derivation
The count of ALICE households for each household size is the difference between the number of households below the living wage threshold and the number below the poverty line:

$$ALICE(n) = HHs\ below\ LW\ threshold(n) - HHs\ below\ MBM\ threshold(n)$$

Total ALICE households are the sum across all household size categories.

3 KEY SOURCES

Input	Source	Table / File
Housing & transportation cost indices	Statistics Canada	Table 46-10-0090; Code reference: cost_index_csd.csv
Market Basket Measure components	Statistics Canada	Table 11-10-0066
Household income distributions	Statistics Canada	Census profile / custom extract; Code reference: income.csv
Provincial living wage estimates	Provincial living wage campaigns	Hardcoded in script, by province
Adjusted MBM & living wage thresholds (CSD-level)	Derived	livingwage_csd.csv
Adjusted income distributions	Derived	incomedist_csd.csv

4 LIMITATIONS & INTERPRETATIVE NOTES

Applicable geographies
To test this methodology, a custom Statistics Canada Census 2021 tabulation was used that includes $5,000 before-tax household income bands by household size. The custom tabulation only covers the Atlantic Canadian provinces.

MBM reference family
The MBM is calibrated to a reference family of two adults and two children. The square-root equivalence scale used to extend it to other household sizes is a standard statistical convention, not a direct empirical estimate of how MBM expenditures vary with household composition in practice.

Living wage household budget model
Provincial living wage figures reflect a specific household budget model, typically a family with two working parents and two children. This may not accurately represent the income requirements of single-person or larger households when scaled by equivalence. Living wage estimates are also updated irregularly across provinces, so the reference year may differ from the Census income distribution year.

Cost index adjustment scope
The cost index adjustment modifies only the housing and transportation components of each threshold. All other expenditure categories (food, clothing, childcare, etc.) are held at the provincial rate and do not reflect local price variation.

CD fallback
Where CD-level income distributions are substituted for suppressed CSDs, the resulting ALICE estimates reflect a broader regional income pattern rather than the specific community. This is flagged in the source column of the income distribution dataset and should be treated with

added caution in communities where local income distributions are expected to diverge substantially from the CD average.

Income year mismatch
The income distribution data reflect 2020 income (the reference year for the 2021 Census), while the MBM and living wage thresholds are derived from more recent data (2024). Direct comparisons across the two years should be made with care given the pace of income and cost changes observed between 2020 and 2024.