Hood Hunter
A House Hunter’s Guide to Narrowing Neighbourhoods

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Can Canada solve its housing crisis without making climate change worse?

Redeveloping existing housing stock, suburban solutions could help limit climate impacts, expert says

Lucas Powers · CBC News · Posted: Sep 09, 2021 12:38 PM ET | Last Updated: September 9

Canada’s immigration boost could fuel hot housing market: experts

By Steve Scherer and Julie Gordon · Reuters
Posted December 9, 2021 10:50 am

Millennials vs. baby boomers: Why the cost of living has skyrocketed for young Canadians

By Katie Dangerfield · Global News
Posted June 26, 2021 5:00 am · Updated June 26, 2021 12:32 pm

WATCH ABOVE: How the pandemic sparked rise in sight unseen home-buying – Oct 2, 2021
Needs Assessment

01 Filter
Neighbourhoods with a specific type of home within a desired budget range

02 Compare
Narrow neighbourhoods according to user-specific criteria

03 View Details
Understand specific assets and limitations of specific neighbourhoods
Core Attributes

- House Price
- Proximity
  - Health Facilities
  - Schools
  - Employment
  - Grocery
  - Transit
- Neighbourhood Safety
- Education Quality
- Investment Value
Existing Solutions

Canadian Statistical Geospatial Explorer

Find Your Neighbourhood
Our Solution - Hood Hunter
Our Solution - Hood Hunter
Our Solution - Hood Hunter

Filter Data

Select City
Datasets

Canadian Census
Criminal code violations per 100,000 population for each census subdivision

CMHC
Average home prices per dwelling type for each urban center with more than 50,000 population

BC FSA
Literacy and numeracy scores for grade 4 and 7 students for each school district

Proximity Database
Proximity measures to parks, hospitals, grocery stores, and more for several coordinates in each census subdivision
## Data Abstraction

<table>
<thead>
<tr>
<th>Data Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Census Subdivision</td>
<td>52 categories</td>
</tr>
<tr>
<td>Dwelling Type</td>
<td>4 categories</td>
</tr>
<tr>
<td>Normalized Safety Score</td>
<td>Sequential: [0,1]</td>
</tr>
<tr>
<td>Normalized Education Score</td>
<td>Sequential: [0,1]</td>
</tr>
<tr>
<td>Normalized Housing Affordability</td>
<td>Sequential: [0,1]</td>
</tr>
<tr>
<td>Normalized Proximity Scores</td>
<td>Sequential: [0,1]</td>
</tr>
<tr>
<td>Average Home Prices (2010 - 2020)</td>
<td>Sequential: $364,746 - $6,531,910</td>
</tr>
</tbody>
</table>
Limitations

Data Limitation
- Limited housing price data especially for rows and apartments
- The current region granularity does not go beyond the census division level

External Validity
- Friends and family contributed to limited user studies to validate design decisions which may introduce bias
Limitations

- Solution has a relatively crowded interface that can overwhelm first time users
- Due to limited screen real estate, some text labels may be illegible to some
- Bidirectionality of certain interactive features is not fully implemented as desired due to time limitations

Solution Critiques
Future Work

Canada Wide Extension
Expand visualization tool to the rest of the provinces and territories

Detailed Proximity Visualization
Include more granularity beyond just census subdivision
Future Work

Geographic Area Filter

Filter neighbourhoods to a specific geographic range with map selection
Future Work

Trend Projection

2005  2010  2015  2020  NOW

FUTURE
Thank you!

Questions?
Additional Criteria