Developing a Residential Property Price Index (RPPI) for Canada: Approach, Risks and Challenges

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**RPPI framework and approach**

**New:** New Housing Price Index (NHPI) with improvements, including the addition of new condominiums

**Resale:** requires data from existing source or development of a new survey program to capture existing housing stock

The RPPI would include both the new and resale housing markets

The resulting RPPI is a comprehensive measure which could be disaggregated into its components
New Housing Price Index

- Produces monthly house and land indexes for 21 metropolitan areas across Canada

- Measures changes over time in contractors’ selling prices of new residential homes and current costs of land

- Based on a matched model variant of the repeat sales approach, using detailed specifications that remain the same between two consecutive months
Limitations

- Not representative of all housing markets and types (i.e. resale, condominiums not included)

- Difficult to allocate value to land or structure

- Difficult to account for changes in quality
Enhancements

- Assess feasibility of including resale housing and new condominiums
- Develop and test how to obtain better estimates of structure and land prices
- Parallel run of hedonically-enhanced price quotes to impute price movement between discontinued model and its replacement
Two potential external data sources have been identified for resale housing in Canada:

- Teranet - National Bank House Price Index™
- MLS® Home Price Index (CREA)

Need to ensure these data sources align with Statistics Canada requirements and international guidelines (i.e. Eurostat RPPI Handbook and SDDS Plus).
<table>
<thead>
<tr>
<th>Teranet – National Bank HPI™</th>
<th>CREA – MLS® HPI</th>
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<tbody>
<tr>
<td>11 cities</td>
<td>6 markets</td>
</tr>
<tr>
<td>Condos included</td>
<td>Condos included</td>
</tr>
<tr>
<td>Transaction price</td>
<td>Transaction price</td>
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<tr>
<td>Admin data from land registries upon closing</td>
<td>Admin data from local real estate boards upon sale</td>
</tr>
<tr>
<td>Lag between transaction and closing, closing and registration</td>
<td>No lag</td>
</tr>
<tr>
<td>Repeat sales</td>
<td>Excludes non-MLS activity</td>
</tr>
<tr>
<td>Existing houses that are resold</td>
<td>Existing houses sold/some new</td>
</tr>
<tr>
<td>Stock weighted</td>
<td>Sales weighted</td>
</tr>
<tr>
<td>Quality adjustment (repeat sales)</td>
<td>Quality adjustment (hedonic regression)</td>
</tr>
<tr>
<td>No land/structure split</td>
<td>No land/structure split</td>
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</tbody>
</table>
Advantages of using existing resale indexes

- Reduced response burden
- Reduced duplication of work and effort
- Efficiencies with respect to resources and costs
Risks of using existing resale indexes

- Few precedents for use of private sector data
- Lack of control over data quality and resulting index
- Lack of transparency on details of methods
- Potential error or manipulation
- Uncertainty about longevity or future revisions
Challenges to developing a RPPI

- **Weighting**
  - Choice of weights to represent the aggregate dollar value of new and resale dwellings

- **Frequency**
  - Annual data needed to calculate weights

- **Geography**
  - Dependent on data holdings

- **Land/structure ratio**
  - Develop approach to approximate split for resale and condos (land/structure split is available for new homes)
Teranet - National Bank HPI™, MLS® HPI (Composite) and NHPI (21 cities) Index 2007=100, February 2013

New Housing Price Index
Year-over-year percentage change
February 2013 compared to February 2012

Source: Statistics Canada, CANSIM table 327-0045.