The Canadian Census of Population Experience on Using Respondents’ Feedback to Improve Collection

UNECE Expert Meeting on Statistical Data Collection
June 12th - June 14th, 2023
Chi Wai Yeung and Ziwei Tang, Statistics Canada

Delivering insight through data for a better Canada
The Canadian Census of Population is conducted every five years (the most recent collection: summer of 2021).

- Has a tradition of using the scientific approach to make continuous improvements.

*The content of this presentation represents the position of the authors and may not necessarily represent that of Statistics Canada.*
2021 Census Wave Methodology

- Consists of a series of well-timed contacts with non-responding households to prompt response

Mail-out:
- 90% of Canadian dwellings
- Census materials mailed directly to dwellings using the postal system

Increased focus on mandatory nature of the Census and consequences of not responding
Qualitative Tests

• one-on-one cognitive interviews with participants
  ➢ on wave methodology and questionnaire development
  ➢ to assess the effectiveness of the wave reminders, questionnaire content changes, and other possible improvements for future Censuses
  ➢ to narrow down the options to test for the quantitative phase

• The participants were selected intelligently to ensure that diverse sociodemographic profiles are represented

• Valuable feedback from participants helped in determining what should be tested quantitatively
Quantitative Tests

• Large scale probabilistic sample (sample size ~135K dwellings in 2019)
• Representative for mail-out in all provinces
• Experimental design with panels (control vs. treatment) to test
  - Wave methodology
  - Questionnaire development
• Weights and bootstrap weights for valid statistical inference
  - To suggest final wave methodology and questionnaire for the Census
## Quantitative Test in 2019 (Wave 3)

<table>
<thead>
<tr>
<th>Questionnaire Package</th>
<th>Self-Mailer</th>
<th>Letter With Envelope</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Image of Questionnaire Package" /></td>
<td><img src="image2" alt="Image of Self-Mailer" /></td>
<td><img src="image3" alt="Image of Letter With Envelope" /></td>
</tr>
</tbody>
</table>
The 2021 Census

• Successful during pandemic
  • High response, self-response, EQ rates

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Response Rates (Global)</th>
<th>Self-Response Rates</th>
<th>EQ Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>98.0%</td>
<td>88.1%</td>
<td>84.1%</td>
</tr>
<tr>
<td>2016</td>
<td>98.4%</td>
<td>88.8%</td>
<td>68.3%</td>
</tr>
</tbody>
</table>
Strategy Preparing the 2026 Census

Qualitative Test
Wave methodology
Summer 2021 & Early 2023

Qualitative Test
Questionnaire development
Summer 2023

Quantitative Test
Wave methodology & Questionnaire development
Summer 2024

2026 Census
Summer 2026
Conclusion

• Scientific approach
• Leverage respondents’ feedbacks
  • Multiple phases
  • Multiple purpose
• Iterative process
Thank you! / Merci!

chiwai.yeung@canada.ca
ziwei.tang@canada.ca