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# Consumer Prices Division Today and Tomorrow

Andrée Girard  
&  
Elizabeth Abraham  
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# Agenda

- What is the CPI?
- CPI Enhancement initiative – Taking us into the future
- Responding to changes
- Results
- Lessons learned



# Introduction

- The Consumer Price Index measures changes in the prices of goods and services that households consume (International Labour Organization, 2004)
- Used for many purposes; for example in Canada, the CPI is used as:
  1. Escalator for different types of payment (pensions, wages, rent, various social programs, etc.)
  2. Key statistic for the Bank of Canada and its monetary policy (inflation target)
  3. General indicator of inflation
  4. Deflator used by the National Accounts

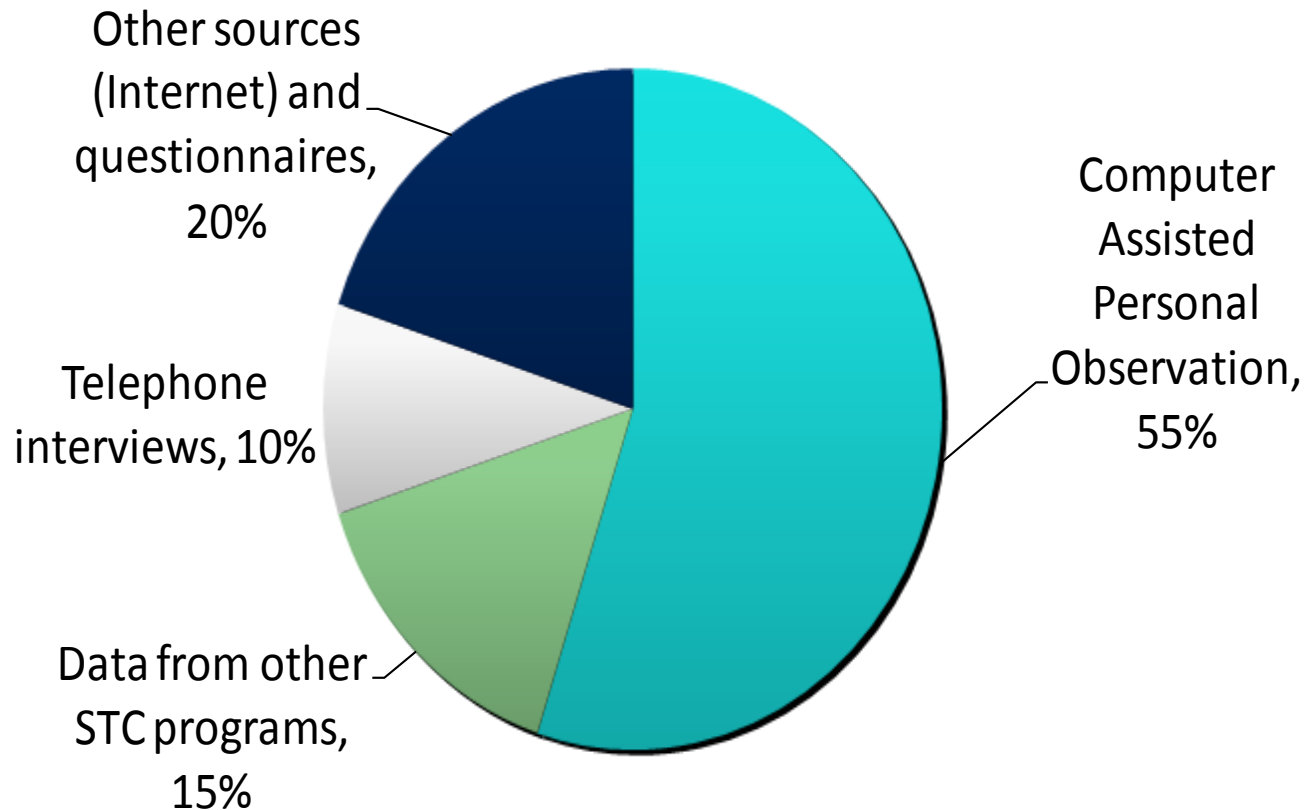


# CPI Collection Today

- On average, about 85,000 prices are collected each month in the field.
- Most of the data are collected by about 90 Interviewers in various cities across Canada.
- Collection primarily done on a unique handheld device called CAPS (Computer Assisted Pricing System).
- In some cases, paper questionnaires/forms are carried and filled on site to collect quality characteristics.
- Some data are collected by Internet and from other STC surveys. Other data sources are used as input to frame improvements.



# Collection methods, by weight in CPI





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# CPI Enhancement Initiative

Taking us into the future



# CPI Enhancement Initiative

- a 5-year project – to be completed in March 2015
- Focused on 4 major areas:
  - More frequent Basket updates
  - Quality improvement
  - IT renewal/enablers
  - **Improved Sample** (*the focus of our presentation*)
- Outcome: a better measure of consumer price change



# CPI Enhancement Initiative – improved sample

- Scope:
  1. Increased Sample and improved Design
  2. Paperless collection
  3. Alternate Data sources
- Strategy:
  - Years 1 to 3 incremental/evolutionary change
  - Years 4 and 5 transformational change





# 1. Increased Sample and improved Design 1/3

- Improved design by:
  - Linking to the Business Register for sample selection
  - Introducing a more robust selection of products and outlets in standardized geographic areas
  - Increasing sample size
- Introduced Pre-contact of potential respondents
  - As a first-phase sampling for the CPI
  - To update the information on the Business Register
  - To build a replacement list for outlets with high turnover or response burden
- Added new geographies
  - A new sub-provincial strata in Quebec and increased price collection in Southern Ontario



# Increased Sample and improved Design

2/3

- Added or revised some indexes
  - Funeral services (new)
  - Travel tours (revised)
  - Passenger vehicle parts maintenance and repairs (revised)
- Updated methodologies of products
  - For prescribed medicines, purchase of passenger vehicles

# Increased Sample and improved Design

3/3

- Improved outlet coverage
  - Added speciality stores for food, clothing, stationery and supplies
- Revised and added Representative Products
  - Improved product coverage in clothing, tobacco, furniture and household appliances; revised and updated product descriptions
- Increased frequency of collection of certain products (recreational)



## 2. CPI paper migration pilot

1/3

- Purpose is to pilot the use of electronic forms in CAPS to:
  - Reduce use of paper forms and the burden of managing paper
  - Improve timeliness, efficiency and accuracy, and
  - Improve data integrity
- Recently piloted the conversion of 8 forms from paper to electronic format.
- Interviewers now directly enter data into CAPS, rather than on paper.



# CPI Migration Pilot Project

2/3

## Benefits

- Reduce expenses and effort associated with managing, tracing and shipping paper forms to/from the field collection staff;
- Increased security of collected data;
- Allows for processing collected data faster; and,
- Timelier access to higher quality data for the CPI.

## Challenges

- Historical data must be entered before phasing out paper.
- Technical limitations with current processing system; lack of flexibility in the processing stages.
- Some forms easy to convert, but some may require methodological review and/or major revisions.
- Resource constraints and competing priorities.



# CPI paper migration pilot

3/3

## Next steps:

- Minor changes being implemented to improve processing functionality.
- New questionnaires to be automatically converted to electronic format.
- Continue migrating traditional paper questionnaires and pricing forms on an ongoing basis. +15 form migrations slated for 2013-14, +25 slated for 2014-15- beginning April 2014.



## 3. Alternate Data Sources

- Pilot increased Internet collection (travel tours, furniture)
- Administrative data
- Other STC surveys
- Commercial data providers
  - Purchasing data bases to collect data and reduce response burden.
  - Exploring option of purchasing “cleaned” scanner data.
  - Data from credit and membership cards.



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# Responding to changes





# Responding to changes

With increased sample came new challenges that called for:

- Introducing different modes of collection such as:
  - Electronic File Transfers
  - Electronic Questionnaires
  - Manual Internet collection from publicly available websites
- Managing respondent burden by setting up response relation and refusal management processes and protocols



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# Results



# As a result we now have...

- an increase in number of quotes in our monthly CPI collection (25,000)
- an improved representativeness of products
- an improved representativeness of outlets
- an efficient way of responding to outlet turnovers
- better data integrity with electronic forms
- improved respondent relations by reducing burden through convenient modes of collection and manual internet collection



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# Lessons learned



# Lessons learned

- Coordination with partners and getting buy-in to introduce efficiencies in a strategic manner
- Methodological changes and input needed
- Built-in flexibility and proactive approach to keeping sample representative
- Flexibility to incorporate respondents' needs and shifting to new modes of collection as needed
- Need an iterative approach to ensure a plan is in place for perpetual update to the files



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# Questions