

Program

Wednesday, November 7, 2018

08:00 -- 15:00

Registration

08:40 -- 08:45

Welcoming Address

Claude Julien, Director General of the Methodology Branch, Statistics Canada, Canada

08:45 -- 09:45

Session 1 -- Keynote Address

Quality and Official Statistics: Present and Future

Paul P. Biemer, RTI International, USA

09:45 -- 10:00

Opening Remarks

Anil Arora, Chief Statistician of Canada, Statistics Canada, Canada

10:00 -- 10:30

Morning Break

10:30 -- 12:00

Session 2A -- Small area estimation with Big data

Big Data, Big Promise, Big Challenge: Can Small Area Estimation Play a Role in the Big Data Centric World?

Partha Lahiri, Lijuan Cao, Ying Han, Kartik Kaushik and Cinzia Cirillo, University of Maryland, USA

Small Area Estimation to correct for measurement errors in big population registries

Danny Pfeffermann and Dano Ben-hur, Central Bureau of Statistics, Israel

Small Area Model-Based Estimation using Big Data

Stefano Marchetti, University of Pisa, Italy

10:30 -- 12:00

Session 2B -- Data integration I

Estimating annual wealth distributions within Canada's System of National Accounts

Margaret Wu and Cilanne Boulet, Statistics Canada, Canada

Transactional Data Processing System

Agnes Waye, Serge Godbout and Nathalie Hamel, Statistics Canada, Canada

Measuring mobility by combining big data and administrative data sources at the Centre for Big data Statistics of Statistics Netherlands

Marko Roos, Statistics Netherlands, The Netherlands

A look inside the box: Combining aggregate and marginal distributions to identify joint distributions

Marie-Hélène Felt, Bank of Canada, Canada

Transport Survey Estimate Adjustment by Permanently Installed Highway-sensors Using Capture-recapture Techniques

Jonas Klingwort, Bart Buelens and Rainer Schnell, University of Duisburg-Essen, Germany and Statistics Netherlands, the Netherlands

12:00 -- 13:30

Lunch

13:30 -- 15:00

Session 3A -- Prioritizing the use of administrative data for official statistics

Development of a census methodology combining administrative data and data obtained through traditional collection

Jean-François Simard, Roxanne Gagnon, Georgina House, Francis Demers and Christian Nadeau, Statistics Canada, Canada

Admin-First as a Statistical Paradigm for Canadian Official Statistics: Meaning, Challenges and Opportunities

Eric Rancourt, Statistics Canada, Canada

Use of administrative data in New Zealand's 2018 Census – the future has arrived

Nathaniel Matheson-Dunning, Anna Lin, Christine Bycroft, Statistics New Zealand, New Zealand

13:30 -- 15:00

Session 3B -- Innovative methods

The Imitation Game: An Overview of a Machine Learning Approach to Code the Industrial Classification

Javier Oyarzun, Statistics Canada, Canada

Modelling measurement errors to enable consistency between monthly and quarterly turnover growth rates

Arnout van Delden, Sander Scholtus, and Nicole Ostlund, Statistics Netherlands, The Netherlands

Bringing survey sampling techniques into big data

Antoine Rebecq, Ubisoft Montréal, Canada

Developing an exploratory open database of buildings

Alessandro Alasia, Jean Le Moullec, Marina Smailes, Statistics Canada, Canada

The challenges of producing national estimates of child maltreatment using administrative data from different jurisdictions

David Laferrière and Catherine Deshaies-Moreault, Statistics Canada, Canada

Thursday, November 8, 2018

08:00 -- 17:00

Registration

08:30 -- 09:30

Session 4 -- Waksberg Award Winner Address

The Sage Statistician and Conditional Calibration

Donald Rubin, Harvard University, USA

09:30 -- 10:30

Morning Break

10:30 -- 12:00

Session 5A -- Geospatial data

Monitoring spatial sustainable development: (Semi-)Automated analysis of satellite and aerial images for energy transition and sustainable indicators.

R.L. Curier, T.J.A. de Jong, D. Iren, S. Bromuri, Statistics Netherlands and Business Intelligence and Smart Services Institute, The Netherlands

Do fences really make good neighbors? A side-by-side comparison of RDD and geofencing methods using risk factor surveys

James Dayton and Matt Jans, ICF, USA

TBA

10:30 -- 12:00

Session 5B -- Non-probability samples

Calibrating Non-Probability Samples With Probability Samples Using LASSO

Jack Chen, Michael R. Elliott and Rick Valliant, University of Michigan, USA

Statistical Inference with Non-probability Survey Samples

Changbao Wu, Yilin Chen and Pengfei Li, University of Waterloo, Canada

Understanding the Effects of Record Linkage on Estimation of Total when Combining a Big Data Source with a Probability Sample

Benjamin Williams, Lynne Stokes, Southern Methodist University, USA

Web Scraping as an alternative data source to predict E-Commerce indicators

José Márcio Martins Júnior, Marcelo Trindade Pitta, Joao Victor Pacheco Dias and Pedro Luis do Nascimento Silva, Brazilian Network Information Center and National School of Statistical Science from IBGE, Brazil

Indirect sampling applied to capture-recapture models with dependency between the sources

Herménégilde Nkurunziza and Ayi Ajavon, Statistics Canada, Canada

12:00 -- 13:30

Lunch

13:30 -- 15:00

Session 6A -- Using alternative data sources for social statistics programs

Herdling and exploring combinations of electronic transaction data for alternative HBS-design purposes

Anders Holmberg, Statistics Norway, Norway

Modernizing the Household Expenditure Program

Christiane Laperrière, Denis Malo and Johanne Tremblay, Statistics Canada, Canada

Combining Multiple Data Sources to Enhance U.S. Federal Statistics

Brian Harris-Kojetin and Robert M. Groves, US National Academies of Sciences, Engineering, and Medicine and Georgetown University, USA

13:30 -- 15:00

Session 6B -- Record linkage

Evaluation of the Accuracy of Links or Candidate Pairs within Record Linkage Analyses

Dean Resnick and Lisa Mirel, National Opinion Research Center at the University of Chicago and National Center for Health Statistics, USA

Decision Rules and Error-Rate Estimation for Record Linkage Using a Probability Model

Clayton Block, Elections Canada, Canada

Combining commercial company data with administrative employer-employee data – methodological challenges of linkage, preparation and representativity

Manfred Antoni, Marie-Christine Laible, Institute for Employment Research (IAB) Research Data Center, Germany

Quality assessment of linked Canadian clinical administrative hospital and vital statistics death data

Nancy Rodrigues, Canadian Institute for Health Information, Canada

Inverse Probability Weighting to Correct for Outcome Misclassification Using Linked Administrative Datasets

Christopher A. Gravel, Kristian B. Filion, Pauline M. Reynier and Robert W. Platt, McGill University and Lady Davis Institute, Canada

15:00 -- 15:30

Afternoon Break

15:30 -- 17:00

Session 7A -- Data fusion and record linkage

Simple linkage-data linear regression methods for secondary analysis

Li-Chun Zhang and Tiziana Tuoto, University of Southampton and Istat, UK and Italy

Statistical inference from multiple data files linked by probabilistic record linkage

Partha Lahiri and Ying Han, University of Maryland, USA

Pairwise Estimating Equations for the primary analysis of linked data

Abel Dasylva, Statistics Canada, Canada

15:30 -- 17:00

Session 7B -- Use of administrative or alternative data sources I

Practical issues in linking data: Experiences with the Linked File Environment (LFE) and its future infrastructure.

Peter Timusk, Julio Rosa, Statistics Canada, Canada

Moving from a census to tax sources: changing the survey frame to better coordinate INSEE samples

Thomas Merly-Alpa, Institut national de la statistique et des études économiques, France

A cross-border traveller's tale: Do I stay or do I go?

Tanja Armenski and Zdenek Patak, Statistics Canada, Canada

Using multiple sources of data to create and refine geographic aggregations for sub-county surveillance

Angela K Werner and Heather Strosnider, Division of Environmental Health Science and Practice, National Center for Environmental Health, Centers for Disease Control and Prevention, USA

Next Generation Data Governance Technologies for Official Statistics

Ryan White, Statistics Canada, Canada

Friday, November 9, 2018

08:00 -- 16:15

Registration

08:45 -- 10:15

Session 8A -- Methods in Demography

Projecting the level of literacy using a microsimulation model

Samuel Vézina and Alain Bélanger, Institut national de la recherche scientifique, Canada

Putting admin data at the core of the Population Statistics System – the experience in England and Wales

Rebecca Tinsley, Office for National Statistics, United Kingdom

The Demographic Characteristics File (DCF): Assigning Race and Hispanic Origin to Domestic Migrants using Census and Federal Administrative Data Sources

Amel Toukabri, U.S. Census Bureau, USA

08:45 -- 10:15

Session 8B -- Data integration II

The Utility of Using Web Surveys to Measure and Estimate Major Health Outcomes, A Pilot Study.

Yulei He, Hee-Choon Shin, Bill Cai, Van Parsons, Peter Meyers and Jennifer Parker, Division of Research and Methodology National Center for Health Statistics U.S. Centers for Disease Control and Prevention, USA

Data integration method: a consolidation of semantic heterogeneity and data sources with the England and Wales custodial policy evaluation project

Marie-Eve Bedard, Statistics Canada, Canada

Combining Unit and Area Level Data for Small Area Estimation via Penalized Multi Level Models

Jan Pablo Burgard, Joscha Krause and Ralf Münnich, Trier University, Germany

Quality Measures for the Monthly Crude Oil and Natural Gas (MCONG) Report

Evona Jamroz, Lihua An, and Sanping Chen, Statistics Canada, Canada

Findings from the Integrated Data Workshops hosted by the Federal Committee on Statistical Methodology and Washington Statistical Society

Alexandra Brown, Andrew Caporaso, Katharine G. Abraham and Frauke Kreuter (Presenter: Linda Young), University of Maryland, USA

10:15 -- 10:30

Morning Break

10:30 -- 12:00

Session 9A -- Data Access Issues - Privacy and Confidentiality in the era of multiple sources

The Framework behind the Confidentiality Classification Tool and its Role in Modernization

Joseph Duggan, Michelle Marquis, Claude Girard and Jack Gambino, Statistics Canada, Canada

Why the U.S. Census Bureau Adopted Differential Privacy for the 2020 Census of Population and Housing

John M. Abowd, U.S. Census Bureau, USA

Implementing Privacy-preserving National Health Registries

Rainer Schnell and Christian Borgs, University of Duisburg-Essen Lotharstr, Germany

10:30 -- 12:00

Session 9B -- Use of administrative or alternative data sources II

Combining Census and Manitoba Hydro data to understand residential electricity usage

Chris Duddek, Statistics Canada, Canada

Valuing Wellbeing Impacts with the General Social Survey

Xavier Lemyre, Department of Canadian Heritage, Canada

Towards a Register-centric Statistical System: Recent Developments at Statistics Canada

Jean Pignal, Philippe Gagné, Christian Wolfe and Tanvir Quadir, Statistics Canada, Canada

Replacing Census questions using linked administrative data

Scott McLeish and Athanase Barayandema, Statistics Canada, Canada

Automated Methods of Data Collection: Retail locations and shopping centres in Vancouver

Paul Holness, Statistics Canada, Canada

12:00 -- 13:30

Lunch

13:30 -- 15:00

Session 10 -- Panel: Data science for official statistics - successes, opportunities and challenges

Trevor Sabeau, Bank of Canada, Canada, Elise Coudin, Institut national de la statistique et des études économiques, France, and Shirley Mills, Carleton University, Canada

15:00 -- 16:00

Session 11 -- Plenary Session

Measuring Uncertainty with Multiple Sources of Data

Sharon Lohr, Arizona State University, USA

16:00 -- 16:15

Closing Remarks

Claude Julien, Director General of the Methodology Branch, Statistics Canada, Canada