

A Workshop on New Approaches for Protecting Privacy in Federal Statistical Programs

Sponsored by the Committee
on National Statistics

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

NATIONAL ACADEMIES OF
SCIENCES BUILDING
2101 CONSTITUTION AVE., NW
LECTURE ROOM

JUNE 6 - 7, 2019

This workshop will discuss new approaches to protecting data confidentiality, with a particular focus on methods that offer formal guarantees of privacy protection, like differential privacy. Discussions will cover the policy and implementation issues from both provider and user perspectives, including the promises and limitations of using formal privacy methods.

For decades, federal statistical agencies have striven to balance the legal and ethical obligations to protect the confidentiality of data subjects with the need to provide informative statistics and access to data for secondary analysis. In recent years, balancing these objectives has become increasingly difficult. The digital revolution has seen an explosion in the growth of available data, both from public and private sources, which ill-intentioned actors could use to compromise confidentiality protections.

Workshop topics and speakers include:

- ❖ Risks of existing statistical disclosure limitation methods
Philip Leclerc, U.S. Bureau of the Census; Ben Rubinstein, University of Melbourne, Australia
- ❖ Privacy protection needs of federal agencies
Michael Hawes, U.S. Bureau of the Census; Donna Miller, National Center for Health Statistics; Darius Singpurwalla, National Center for Science and Engineering Statistics
- ❖ Differential privacy tutorial: What it is, how it works, how to implement it
Alexandra Wood, Harvard University, Kobbi Nissim, Georgetown University
- ❖ Current technical capabilities in formal privacy: What can be released via existing methods to satisfy formal privacy and still have high data usefulness? What is not yet possible?
Kamalika Chaudhuri, University of California San Diego; Ashwin Machanavajjhala, Duke University; Ilya Mironov, Google; Salil Vadhan, Harvard University
- ❖ Policy issues and practical experiences with formal privacy from a federal government perspective
John Abowd, U.S. Bureau of the Census; Barry Johnson, Statistics of Income Division; Nancy Potok, U.S. Office of Management and Budget
- ❖ Implications of formal privacy for data users: What are users of data products concerned about if agencies move to formal privacy? What are the benefits of doing so?
- ❖ *Mike Davern, NORC; John Friedman, Brown University and NBER; Julia Lane, New York University; Joe Salvo, New York City Department of City Planning*
- ❖ Looking forward: What can agencies do in the short and long term to achieve improved privacy protection? Are there intermediate solutions?
Tom Krenzke, Westat; Jerry Reiter, Duke University; Lars Vilhuber Cornell University
- ❖ Speed session presentations
Five-minute presentations by audience participants on privacy research, problems, experiences, and solutions