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Workshop on 2020 Census Data Products Committee on National Statistics Division of Behavioral and Social Sciences and Education

Workshop on 2020 Census Data Products: Data Needs and Privacy Considerations

December 11–12, 2019 • Washington, DC
National Academy of Sciences Building
2101 Constitution Avenue NW
Auditorium

Biographical Sketches of Planning Committee and External Presenters

Planning Committee for the Workshop

- V. Joseph Hotz (co-chair) is Arts and Sciences professor of economics at Duke University. He is also the current chair of the Committee on Population Statistics (COPS) of the Population Association of America (PAA), and a research associate at the National Bureau of Economic Research. A past member of the Committee on National Statistics (CNSTAT) of the National Academies of Sciences, Engineering, and Medicine (NASEM), his previous NASEM service includes membership on: the Panel on Access to Research Data: Balancing Risks and Opportunities; the Panel on New Directions in Social Demography, Social Epidemiology, and the Sociology of Aging; and several studies related to the Survey of Income and Program Participation. Dr. Hotz has Ph.D. and M.S. degrees in economics from the University of Wisconsin–Madison, and a B.A. degree from the University of Notre Dame.
- JOSEPH SALVO (co-chair) is chief demographer, Population Division, New York City
 Department of City Planning, and former director of the division. Dr. Salvo is also a
 current member of the Committee on Population Statistics of the Population Association of
 America and served as past president of the Association of Public Data Users. For
 NASEM, he was a member of the Panel on Research on Future Census Methods (2010
 Census planning) and of three panels related to the Census Bureau's American Community
 Survey, and co-chaired the planning committee for the Workshop on Respondent Burden in
 the American Community Survey. Dr. Salvo is a fellow of the American Statistical
 Association. He has M.A. and Ph.D. degrees in sociology from Fordham University.
- CATHERINE FITCH is associate director of the Institute for Social Research and Data Innovation (ISRDI) at the University of Minnesota, the home of the Minnesota Population Center and Integrated Public Use Microdata Series (IPUMS) data projects. Dr. Fitch is also founding codirector of the Minnesota Research Data Center (a Federal Statistical Research Data Center). Through her career at the Minnesota Population Center, she has been involved in the creation and expansion of the IPUMS databases; in addition to social science data infrastructure, her research focuses on family and historical demography. Dr. Fitch holds Ph.D. and M.A. degrees in history and an M.P.P. degree from the University of Minnesota, and a B.A. degree in history and mathematics from Saint Olaf College.
- DANIEL GOROFF is vice president and program director at the Alfred P. Sloan Foundation, and is currently director of the Social and Economic Sciences Division at the National Science Foundation. Previously, he served as dean of faculty and vice president at Harvey Mudd College and on the faculty at Harvard University. He has twice served in the Office of

Science and Technology Policy, Executive Office of the President. Dr. Goroff has participated in a variety of NASEM activities, most recently the Forum on Open Science and the current Roundtable on Aligning Incentives for Open Science. He has a Ph.D. in mathematics from Princeton University, an M.Phil. in economics from Cambridge, and an A.B.-M.A. degree in mathematics from Harvard University

- EDDIE HUNSINGER is a research data specialist with the California Department of Finance, Demographic Research Unit. His work focuses on development and evaluation of demographic methods, as well as the collection, organization, and analysis of data used in population estimates and projections. Prior to moving to the position in California in August 2019, Mr. Hunsinger was Alaska's state demographer for eight years. He has served as a steering committee member for the Federal-State Cooperative for Population Estimates, and as chair of the Federal-State Cooperative for Population Projections. He has a B.A. degree in geography from the University of California, Los Angeles, and an M.A. degree in demography from the University of California, Berkeley, and is a current student in the masters of library and information science program at the University of Washington.
- LINDA JACOBSEN is vice president of U.S. Programs at the Population Reference Bureau. She is a current member of the Committee on Population Statistics of the Population Association of America, president of the Southern Demographic Association, and chair of the board of directors of the Council of Professional Associations on Federal Statistics. For NASEM, Dr. Jacobsen served on a panel for assessing priority technical issues for the American Community Survey and on the planning committee for the Workshop on the Benefits and Burdens of the American Community Survey. She is currently a member of the NASEM Committee on Transparency and Reproducibility of Federal Statistics for the National Center for Science and Engineering Statistics. She is a fellow of the American Statistical Association. Dr. Jacobsen has Ph.D. and M.S. degrees in sociology from the University of Wisconsin–Madison.
- MICHAEL MCDONALD is associate professor of political science at the University of Florida. Previously, he served on the faculties of George Mason University, Vanderbilt University, and the University of Illinois, Springfield. He is co-principal investigator of the Public Mapping Project, which encourages public participation in legislative redistricting and which produced the web-based, open source DistrictBuilder platform for collaborative redistricting. Dr. McDonald has served as either expert witness in election lawsuits or as a redistricting consultant in numerous states. He has a B.S. degree in economics from the California Institute of Technology, and a Ph.D. in political science from the University of California, San Diego.
- MATTHEW SNIPP, is Burnet C. and Mildred Finley Wohlford professor of sociology at Stanford University, where he is also director of the Secure Data Center of the Institute for Research in the Social Sciences. He was a longtime member of the Census Bureau's Racial and Ethnic Advisory Committee, and has served on the Board of Scientific Counselors for the National Center for Health Statistics. Dr. Snipp is a current member of the Committee on National Statistics, and has served on numerous NASEM activities related to the decennial census, including the Panel on Residence Rules in the Decennial Census, the Panel to Review the 2010 Census, and the Standing Committee on Reengineering Census Operations. He has a Ph.D. and an M.S. in sociology from the University of Wisconsin—Madison, and a B.A. degree in sociology from the University of California, Davis.

C. Geospatial Analyses of Social/Demographic Conditions

- SETH SPIELMAN is associate professor of geography at University of Colorado Boulder, where he now serves as chief data strategy and analytics officer. He has also served as senior data scientist/manager at Apple, working on machine learning applications in Apple Maps navigation and search. His expertise is at the intersection of maps, statistics, machine learning, and the social sciences. He was co-editor of a special issue of *Computers*, *Environment, and Urban Systems* on spatial analysis with census data, and he has won a distinguished scholar award in urban planning from the American Association of Geographers. He has a B.A. in geography from Macalester College, an M.S. in urban planning from Columbia University, and a Ph.D. in geographic information science from the University at Buffalo, State University of New York.
- DAVID VAN RIPER is director of spatial analysis at the Minnesota Population Center, where he began as a graduate research assistant on the IPUMS National Historical Geographic Information System (NHGIS) project in 2001 and became a research fellow in 2005 before being named to his current position in 2010. He is currently co-principal investigator on both the IPUMS NHGIS and IPUMS GeoMarker projects, and does work on the geographic aspects of other IPUMS products as well. He has a B.A. degree and an M.A. degree, both in geography, from the University of Wisconsin–Madison and the University of Minnesota, respectively.
- NICHOLAS NAGLE is associate professor of geography at the University of Tennessee, Knoxville. He is also a joint faculty affiliate at the Oak Ridge National Laboratory, including the Urban Dynamics Institute. His research focuses on the design of statistical methods that integrate information from multiple sources (such as censuses/surveys and imagery). For NASEM, he served as a member of the Standing Committee on Reengineering Census Operations that offered guidance on the planning of the 2020 Census. He has a B.A. in public policy from the University of Chicago and M.A. degrees in economics and geography and a Ph.D. in geography from the University of California, Santa Barbara.
- MARK HANSEN is David and Helen Gurley Brown professor of journalism and innovation at the Columbia Journalism School, Columbia University, where he has served since 2012 as inaugural director of the east coast branch of the Brown Institute for Media Innovation. Previously, he served on the statistics, design media arts, and electrical engineering faculties of the University of California, Los Angeles, and on the technical staff at Bell Laboratories. His expertise is at the intersection of data, art, and technology, specializing in the presentation of data for the public and in computational journalism. He has a B.S. in applied mathematics from the University of California, Davis, and M.A. and Ph.D. degrees in statistics from the University of California, Berkeley.

D. Redistricting and Related Legal Uses

JUSTIN LEVITT is associate dean for research and professor at Loyola Law School, where he teaches on constitutional law, the law of the political process, and criminal procedure. From 2015–2017, he served as deputy assistant attorney general for the Civil Rights Division of the U.S. Department of Justice, and so was directly involved in adjudication of Voting Rights Act violations and other civil rights policies. He previously served on the faculty of New York University School of Law and as counsel to the Democracy Program

of the school's Brennan Center for Justice. He has a B.A. from Harvard College and a J.D./M.P.A. from Harvard Law School/Harvard Kennedy School.

ANDY BEVERIDGE is president and CEO of Social Explorer, Inc., and professor of sociology at Queens College and the Graduate School and University Center of the City University of New York. Since 1993, he has been a consultant on census data to *The New York Times*, and has served as an expert in over 35 court cases at the state and federal level using census data, including about one dozen redistricting cases. He has previously taught in the sociology department at Columbia University. He holds a B.A. in economics and M.Phil. and Ph.D. degrees in sociology, all from Yale University.

E. Delivery of Government Services

CLIFFORD COOK is senior planning information manager at the City of Cambridge,
Massachusetts; having worked in various planning capacities for the city since 1995 and
taking on his current project planner/supervisor role in 2016. In his role there, he acts as the
unofficial city demographer—analyzing and integrating a wide variety of data sources,
including demographic, land use, development and economic data. Previously, he held
planning/development positions at the Massachusetts Executive Office of Communities and
Development and at the Cambridge Housing Authority. He has served as president of the
Association of Public Data Users. He has a B.A. in biology and society and a master's
degree in regional planning, all from Cornell University.

KEITH WILEY is a senior research associate at the Housing Assistance Council. He specializes in data management and analysis, particularly working with large datasets. His areas of interest include rural housing and development, federal housing and financial oversight policies, and smart growth planning and policies. He co-authored a chapter in *Rural Housing and Economic Development* entitled "Reinvesting in Rural America through Affordable Mortgage Finance" and authored an article in the *Journal of Housing Policy Debate* on "The Role of the CDBG Program in Rural America," among other reports analyzing rural lending activities. He has a master's degree from American University and a Ph.D. from the University of Maryland, Baltimore County, both in public policy.

BETH JAROSZ is senior research associate in U.S. Programs at the Population Reference Bureau (PRB). She joined PRB in 2013 after more than a decade of experience in demographic estimation, forecasting, and analysis as senior demographer at the San Diego Association of Governments (SANDAG), the regional planning agency for the San Diego region. At SANDAG, she worked on a variety of topics ranging from transportation planning to public health. She has also served as an instructor of sociology at Pensacola State College. For NASEM, she served on the planning committee for the 2018 Workshop on Improving the American Community Survey. She holds a B.S. in applied economics from the University of Rhode Island and an M.A. in demographic and social analysis from the University of California, Irvine.

ABRAHAM FLAXMAN is associate professor of global health at the Institute for Health Metrics and Evaluation (IHME) at the University of Washington. His work on estimating the global burden of disease and generating other health metrics makes use of integrative systems modeling, combining systems dynamics models of process with statistical models to bring together all available sources of information and data. Prior to joining IHME, he was a postdoctoral fellow at Microsoft Research. He has a B.S. in mathematics from the

Massachusetts Institute of Technology and a Ph.D. in algorithms, combinatorics, and optimization from Carnegie Mellon University.

F. Business and Private Sector Applications

- KEN HODGES is a demographer at Claritas. His responsibilities include methodology and evaluation for domestic small-area demographic estimates, the incorporation of U.S. census (including American Community Survey) data in the company's information products, and universe estimates standards for the company's global operations. He is active in the field of applied demography, having served on the 2010 Census Advisory Committee, the Population Association of America's Committee on Population Statistics, and the boards of the Association of Public Data Users and Council of Professional Associations on Federal Statistics. Prior to joining in 1993, he was director of demography at Donnelley Marketing Information Services. He has a Ph.D. in sociology/demography from Cornell University.
- NADIA EVANGELOU is senior economist and director of forecasting at the National Association of Realtors in Washington, DC; she has worked at the association as an economist since 2014 and assumed her current position earlier in 2019. She holds a M.S. in applied economics from Johns Hopkins University.
- QUENTIN BRUMMET is a senior research methodologist in the Statistics and Methodology department at NORC at the University of Chicago. His research includes development of new methods statistical methods for causal inference and survey methodology. Prior to joining NORC, he was chief of the Survey and Economic Branch in the U.S. Census Bureau's Center for Administrative Records Research and Applications (CARRA), where he oversaw research on incorporating administrative records data into a variety of federal surveys. He has a B.A. in mathematics and economics from Illinois Wesleyan University and M.A. and Ph.D. degrees in economics from Michigan State University.

G. Identification of Rural and Special Populations (Part 1)

- RANDALL AKEE is associate professor of public policy and American Indian studies at the Luskin School of Public Affairs, University of California, Los Angeles. He has been a David M. Rubenstein Fellow in economic studies at the Brookings Institution, and remains a faculty research fellow at the National Bureau of Economic Research and a research fellow at the Harvard Project on American Indian Economic Development. He has also served on the faculty of Tufts University, and worked for several years for the State of Hawaii Office of Hawaiian Affairs Economic Development Division. His main research interests are in labor economics, economic development, and migration, and currently focuses on income inequality and immobility by race and ethnicity. He has a B.A. in economics from Dartmouth College, an M.A. in international and development economics from Yale University, and a Ph.D. in political economy from Harvard University.
- NORMAN DEWEAVER has been an analyst of data on the American Indian and Alaska Native populations since 1980, and remains an active consultant on tribal data issues. He has been involved in a work group convened by the Policy Research Center of the National Congress of American Indians to analyze the potential effect of new disclosure avoidance procedures on the 2020 census tabulations for the American Indian and Alaska Native populations. He was also involved in the Census Bureau's Census Information Center

program from the late 1980s through 2004, and has conducted analyses for individual Indian tribes and other tribal organizations including the Inter Tribal Council of Arizona.

H. Use as Denominators for Rates and Baseline for Estimates

- NANCY KRIEGER is professor of social epidemiology at the Harvard T.H. Chan School of Public Health, in the Department of Social and Behavioral Sciences, where she has been on the faculty since 1995. An internationally recognized social epidemiologist, her work has included serving as principal investigator of the Public Health Disparities Geocoding Project, marshaling various census and other data resources to generate area-based socioeconomic measures for analyzing health disparities, and her empirical work has also included research on measuring of social class (at the individual, household, and neighborhood levels) for use in monitoring of social inequalities in health. She has a Ph.D. in epidemiology from the University of California, Berkeley.
- MANDI YU is a mathematical statistician in the Statistical Research and Applications Branch at the National Cancer Institute (NCI), where she serves as team lead for acquiring, processing, and releasing population and mortality data for generating cancer incidence and mortality statistics. Her research interests include statistical disclosure limitation and record linkage evaluation. Prior to joining NCI in 2009, she was mathematical statistician at the US. Food and Drug Administration. She has a B.A. in international business administration from Nankai University in China, an M.S. in survey methodology from the University of Nebraska–Lincoln, and a Ph.D. in survey methodology from the University of Michigan.
- ALEXIS SANTOS is assistant professor of human development and family studies at the College of Health and Human Development, Pennsylvania State University, where he is a research associate at the Center for Healthy Aging and the Population Research Institute and a demographic data fellow at the Administrative Data Accelerator. Prior to joining the Penn State faculty, he was a postdoctoral fellow in epidemiology and biostatistics at the U.S. Army Institute for Surgical Research. His research focuses on developmental research methodology and individual development, and he is currently editor for *Applied Demography*. He has a B.A. in economics from the University of Puerto Rico at Cayey, an M.A. in economics from the University of Puerto Rico at Rio Pedras, and a Ph.D. in applied demography from the University of Texas at San Antonio.
- JEFF HARDCASTLE is state demographer of Nevada, administratively housed in the Nevada Department of Taxation. He is responsible for producing annual state, county, city, and unincorporated town estimates; population projections; age, sex, race, and Hispanic origin estimates and projections; disseminating data to interested parties and the general public; networking with other state agencies; representing the state of Nevada to the Federal-State Cooperative Program for Population Estimates (FSCPE) and the Federal-State Cooperative Program for Population Projections (FSCPP). He served four terms as chair of FSCPE Steering Committee and as chair of FSCPP. For NASEM, he served on the Panel on Addressing Priority Technical Issues for the Next Decade of the American Community Survey (First Phase). He has an M.A. in urban and regional planning from the University of Colorado at Denver.

I. Identification of Rural and Special Populations (Part 2)

- ERIC SANDBERG is a demographer in the Population and Census Unit of the Research and Analysis Section in the Alaska Department of Labor and Workforce Development. In that capacity, he is Alaska's representative in the Federal-State Cooperative Programs for Population Estimates and Population Projections (FSCPE/FSCPP) with the Census Bureau. He has worked in Alaska demographics since 2009 and was the population and mapping specialist for the Alaska Redistricting Board after the 2010 Census. He has a B.S. in geography from the University of Oregon and a M.S. in geography from Michigan State University.
- WILLIAM O'HARE has over 40 years of experience as an applied demographer and data analyst, currently in his own consultancy as O'Hare Data and Demographic Services. For 15 years, he directed the KIDS COUNT project at the Annie E. Casey Foundation. He has a Ph.D. from Michigan State University.
- JAN VINK is an extension associate at the Program on Applied Demographics at Cornell Institute for Social and Economic Research, Cornell University. In this capacity, he is the state of New York's representative to the FSCPE and FSCPP programs with the Census Bureau, and also leads the Program on Applied Demographics' role as a coordinating agency in the New York State Data Center. Previously, he was a scientist with TNO Defence, Security and Safety (the Netherlands Organisation for Applied Scientific Research). His training in econometrics is from the University of Groningen in the Netherlands.
- AARON SOJOURNER is associate professor of work and organizations at the Carlson School of Management, University of Minnesota. A labor economist, his research includes work on policies to promote efficient and equitable development of human capital with a focus on early childhood and K–12 education systems. From 2016–2017 he was a senior economist with the Council of Economic Advisers, Executive Office of the President. He is a research fellow at IZA, the European labor-economics research institute, and a visiting scholar at the Federal Reserve Bank of Minneapolis. He has a B.A. in history from Yale University, an M.A. in public policy analysis from the University of Chicago, and a Ph.D. in economics from Northwestern University.

J. Panel Discussion on Key Privacy Issues

- PAUL OHM is professor of law at the Georgetown Law Center, Georgetown University, and faculty director for the Center for Privacy and Technology. He previously served on the faculty of the University of Colorado Law School. He was an appointed commissioner on the U.S. Commission on Evidence-Based Policymaking. His research focuses on interdisciplinary bridges between law and computer science, and on how evolving technology affects and disrupts individual privacy. Prior to his academic career, he was a trial attorney in the Computer Crime and Intellectual Property Section of the U.S. Department of Justice, and a clerk for two federal judges. He also worked for several years as a computer programmer and network systems administrator. He has a B.A. and B.S. from Yale University and a J.D. from the University of California, Los Angeles, School of Law.
- HELEN NISSENBAUM is a professor of information technology at Cornell Tech. Her research focuses on ethical perspectives on policy, law, science, and engineering relate to information technology and data science. She has contributed to the development of

privacy-enhancing software, including TrackMeNot and AdNauseam. For NASEM, she served on the Committees on Privacy in the Information Age and on Being a Scholar in the Digital Age, and served on the planning committee for the 2015 Workshop on Privacy for the Intelligence Community. She has a B.A. in philosophy and mathematics from the University of the Witwaterstrand in South Africa and a Ph.D. in philosophy from Stanford University.

- DANAH BOYD is founder and president of Data & Society (the Data and Society Research Institute), a partner researcher at Microsoft Research, and a visiting professor at New York University. Her research focuses on ensuring that society has a nuanced understanding of the relationship between technology and society, and issues of equity and bias in particular. A director of the Social Science Research Council, she has received the Electronic Frontier Foundation's Pioneer/Barlow Award. Originally trained in computer science, she has a Ph.D. from the School of Information at the University of California, Berkeley.
- DANIEL BARTH-JONES is assistant professor of clinical epidemiology at the Mailman School of Public Health, Columbia University. An infectious disease epidemiologist, his research focuses on computer simulation of transmission and public health response to HIV and other disease epidemics. He has also done extensive work in the area of statistical disclosure analysis and control, particularly for statistical and geospatial disclosure control methods for compliance with the HIPAA Privacy Rule. He has MPH and Ph.D. degrees, both from the University of Michigan.
- OMER TENE is vice president and chief knowledge officer at the International Association of Privacy Professionals, providing content, research, and programming support for the privacy community. He is an affiliate scholar at the Stanford Center for Internet and Society and a senior fellow at the Future of Privacy Forum. He was appointed to the arbitration panel under the Privacy Shield Agreement between the United States and the European Union. He holds degrees from the New York University School of Law, INSEAD, and Tel Aviv University.