

BRIEF OF AMICUS CURIAE

INTEREST OF THE AMICUS The American Statistical Association (ASA) is the primary professional association of statisticians in the United States. ASA's nearly 18,000 members include academic teachers of statistics, statisticians employed in all levels of government, and statisticians employed in business and industry.

ASA takes no position on the appropriate disposition of this case or on the legality or constitutionality of any aspect of the 2000 census. ASA also takes no position in this brief on the details of any proposed use of statistical sampling in the 2000 census.

ASA is, however, concerned to defend statistically designed sampling as a valid, important, and generally accepted scientific method for gaining accurate knowledge about widely dispersed human populations. Indeed, for reasons explained in this brief, properly designed sampling is often a better and more accurate method of gaining such knowledge than an inevitably incomplete attempt to survey all members of such a population. Therefore, in principle, statistical sampling applied to the census "has the potential to increase the quality and accuracy of the count and to reduce costs." [ASA Blue Ribbon Panel, *Amstat News*, October 1996, p. 13]. There are no sound scientific grounds for rejecting all use of statistical sampling in the 2000 census.

As its argument in this brief, ASA submits the statement of its Blue Ribbon Panel that addresses the relevant statistical issues. ASA respectfully submits this brief in hopes that its explanation of these points will be helpful to the Court.

THE ASA BLUE RIBBON PANEL

In 1996, the President of the American Statistical Association appointed a "Blue Ribbon Panel" to examine the appropriateness of using statistical methods as part of conducting the decennial census. The Blue Ribbon Panel's Statement, issued in September 1996, is attached as an Appendix and summarized in this brief. The members of the panel were among the nation's leading experts on the statistical sampling methods proposed for use in the 2000 census. The panel members were:

Dr. John E. Rolph, Panel Chair, is Professor of Statistics and Chair of the Information and Operations Management Department in the Marshall School of Business at the University of Southern California. He is incoming chair of the National Research Council's Committee on National Statistics. He can be reached at: Marshall School of Business, University of Southern California, Los Angeles, 90089-1421; (213) 740-4829/fax: (213) 740-8494 and e-mail: jrolph@bus.usc.edu.

Dr. Lynne Billard, ex officio. As 1996 ASA President she appointed and charged the members of the Blue Ribbon Panel to address the use of statistical methods in the decennial census. Dr. Billard is a Distinguished University Professor, Department of Statistics, University of Georgia, Athens, GA 30602-1952; (706) 542-3281/fax: (706) 542-3391 and e-mail: lynne@stat.uga.edu.

Dr. Wayne A. Fuller has cooperated with the U.S. Census Bureau, BLS, and NASS on research topics including regression estimation, survey sampling, and measurement error, among them. He is a Distinguished Professor of Statistics at Iowa State University and can be reached at the Department of Statistics, Iowa State University, Ames, IA 50010; (515) 294-5242/fax: (515) 294- 2456 and e-mail: waf@iastate.edu.

Dr. John Neter, 1985 ASA President, is Professor Emeritus, Terry College of Business, University of Georgia, Athens, GA 30602-6255. Dr. Neter is the author of numerous texts, monographs, and journal articles, many of which deal with statistical sampling. He may be reached at (706) 543-4422/fax: (706) 542-7196 and e-mail: cmsjxn@uga.cc.uga.edu.

Dr. Janet L. Norwood, former Commissioner of the Bureau of Labor Statistics under three Administrations, who also has served on the Committee on National Statistics (CNSTAT) Panel on Census Requirements in the Year 2000 and Beyond. She is the author of numerous articles on statistical policy issues and the author of *Organizing to Count: Change in the Federal Statistical System*. Dr. Norwood, Senior Fellow, The National Urban Institute, can be reached at 5610 Wisconsin Avenue, Apt. PH21D, Chevy Chase, MD 20815-4415; telephone and fax: (301) 951-8581 and e-mail: jnorwood@nas.edu.

Dr. Richard C. Rockwell, who represents the American Statistical Association on the 2000 Census Advisory Committee to the Secretary of Commerce. Dr. Rockwell, who was also a member of ASA's Census 2000 Blue Ribbon Panel, is Senior Research Scientist, Institute for Social Research, University of Michigan and Executive Director, Inter-University Consortium for Political and Social Research, the world's largest archive of quantitative data in the social sciences. He can be reached at P.O. 1248, Ann Arbor, MI 48106-1248; (313) 764-2570/fax: (313) 764-8041 and e-mail: rcr@umich.edu.

Dr. Donald B. Rubin, who with colleagues and students has been involved with various research projects at the Census Bureau for more than a decade. A professor of statistics at Harvard University, he also has nearly 250 publications (including several books), on topics such as computational methods, causal inference, survey methods, techniques for handling missing data, Bayesian methods, multiple imputation, matched sampling, and applications in many areas of social and biomedical science. Dr. Rubin can be reached at the Department of Statistics, Harvard University, 1 Oxford Street, Cambridge, MA 02138-2901; (617) 495-5498/fax: (617) 496-8057 and e-mail: rubin@hustat.harvard.edu.