

## Curriculum Vitae

Michael P. Cohen  
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### Employment

#### **Principal Sampling Statistician, American Institutes for Research (AIR), Research and Evaluation, Domestic V, August 2011 to present**

Responsibilities cover all aspects of complex survey design and estimation, including sample design, imputation, variances, sample size and power determination, and weighting. Evaluated and recomputed weights for Project Talent, a survey of 377,000 high school students in 1960. Consulted on sample and nonresponse bias analysis for the Program for the International Assessment of Adult Competencies (PIAAC); consulted on sample design for the OECD Teaching and Learning Survey (TALIS); conducted power analyses and consulted for sample design for Department of Education's National Reporting System. Led on sampling for a Transportation Security Administration survey. Lead on sampling for the Health Care Enrollee Experience Survey and for surveys pertaining to transitional kindergarten in California.

#### **Adjunct Professor, Department of Statistics, George Mason University, Fairfax VA 22030, January 2007 to December 2011.**

Taught Statistics 474/574 Survey Sampling to master's degree level students and advanced undergraduates. Have also taught Statistics for Engineering and Science II and Statistical Computer Packages.

#### **Statistical Consultant, Washington, D.C. 20009, March 2006 to August 2011.**

Independent statistical consultant (Statistical Consulting LLC in Washington DC).

#### **Senior Consultant to National Opinion Research Center (NORC), Washington DC 20006, October 2007 to September 2010**

Worked on sample design, data analysis, sample selection, and documentation for surveys of records and transactions for the Office of Historical Trust Accounting of the U.S. Department of the Interior. The records and transactions sampled pertain to individual American Indian monies and Tribal monies.

**Assistant Director for Survey Programs, Bureau of Transportation Statistics, RITA, U.S DOT, Washington, D.C. 20590, May 2002 to March 2006 (early federal retirement).**

Headed the Office of Survey Programs (OSP). Responsibilities included directing the survey programs of the Bureau of Transportation Statistics. The OSP survey programs included the Commodity Flow Survey (joint with the Census Bureau), the National Household Travel Survey (joint with the Federal Highway Administration), the Omnibus Household Survey, and targeted surveys (e.g. two surveys of mariners, surveys of general aviation pilots, bicyclists and pedestrians, and persons with disabilities).

**Senior Mathematical Statistician, Bureau of Transportation Statistics, Washington, D.C. 20590, July 2000 to May 2002.**

Member of the Office of Survey Programs. Responsibilities included planning for the American Freight Survey, research for the National Household Travel Survey, sample design and modeling for the Commodity Flow Survey, statistical standards and guidelines for the U.S. Department of Transportation, and technical consulting.

**Mathematical Statistician, National Center for Education Statistics, Washington, D.C. 20208, January 1987 to July 2000.**

Member of the Statistical Standards Program (formerly called the Statistical Standards and Methodology Division). Responsibilities included technical consulting on survey design, sampling, weighting, imputation, and other methodological issues. Did research on hierarchical linear models (multilevel models), particularly sample size issues and applications to education, and on imputation. Was a liaison to the National Postsecondary Education Cooperative.

**Mathematical Statistician, Division of Price Statistical Methods, Bureau of Labor Statistics, Washington, D.C. 20212, September 1979 to January 1987.**

Responsibilities included variance estimation for the U. S. Consumer Price Index (CPI), estimation of the components of variance, small area estimation of the CPI base cost weights, imputation techniques, principal person weighting and collapsing techniques for the U.S. Consumer Expenditure Surveys, and related applied research problems. Developed (with John P. Sommers) the method for estimating the base cost weights (and for evaluating the estimation procedure) that was implemented in the 1987 CPI Revision. Developed the method and estimated the components of variance for the CPI that were an input to the CPI survey design cost model. Served as the lead mathematical statistician on the Cost Weight and Index Estimation Interdivisional CPI Revision Working Groups.

## Education

- Ph. D. Mathematics (Applied Mathematics Program),  
University of California, Los Angeles, 1978  
Specialty: Statistics  
Dissertation: "Fisher Information and Estimators of Location-Scale  
Parameters"  
Advisor: Charles J. Stone  
Experience as both a research and teaching assistant
- M. A. Mathematics, University of California, Los Angeles, 1971
- B. A. Mathematics (Minor in Economics)  
(with Honors) University of California, San Diego, La Jolla California, 1969

## Publications

- M. P. Cohen, "Pentamorphic, Octamorphic, and Nonamorphic Numbers Derive from Automorphic Numbers," *Journal of the Washington Academy of Sciences*, 2020, Vol. 106, No. 3, 21-27
- M. P. Cohen, "Are 2018, 2019, and 2020 Congruent?" *Journal of the Washington Academy of Sciences*, 2020, Vol. 106, No. 3, 17-20
- M. P. Cohen, "Why Not an Interval Null Hypothesis?" *Journal of Data Science*, 2019, Vol. 17, No. 2, 383-390
- M. P. Cohen, "Non-Asymptotic Mean and Variance Also Approximately Satisfy Taylor's Law," (Letter to the Editor), *The American Statistician*, 2017, Vol. 71, No. 2, 187
- M. P. Cohen, "Discussion: Statistical Inference with Clustered Data in Survey Sampling," *2016 Proceedings of the Joint Statistical Meetings*, American Statistical Association, 4-8
- M. P. Cohen, "On Three Measures of Explanatory Power with Axiomatic Representations," *The British Journal for the Philosophy of Science*, 2016, Vol. 67, 1077-1089
- M. P. Cohen, "Zeroes in the Digits of  $N$  Factorial." In *Topics in Recreational Mathematics 2015* (C. Ashbacher, ed.), Amazon, 2015, Vol. 4, 100-105
- M. P. Cohen, "On Schupbach and Sprenger's Measures of Explanatory Power," *Philosophy of Science*, 2015, Vol. 82, No. 1, 97-109
- M. P. Cohen, "Influential Statisticians of Yesteryear Active in the Washington Statistical Society," *Journal of the Washington Academy of Sciences*, 2014, Vol. 100, No. 3, 7-20

- M. P. Cohen, "History of the Washington Statistical Society," *2014 Proceedings of the Joint Statistical Meetings*, American Statistical Association, 2404-2412
- Z. He, A. F. Karr, M. P. Cohen, D. Battle, D. L. Achorn, and A. D. McKay, "Construction of Full Sample and Replicate Weights for Project Talent, with Applications," Technical Report 194, National Institute of Statistical Sciences, Research Triangle Park, NC, 2014
- Z. He, A. F. Karr, M. P. Cohen, D. Battle, D. L. Achorn, and A. D. McKay, "Construction of Replicate Weights for Project TALENT," *2013 Proceedings of the Joint Statistical Meetings*, American Statistical Association, 1188-1199
- M. P. Cohen, "Discussion of 'Calibrated Bayes, an Alternative Inferential Paradigm for Official Statistics' by Roderick J. Little," *Journal of Official Statistics*, 2012, Vol. 28, 363-365
- M. P. Cohen, "Sample Means of Independent Standard Cauchy Random Variables Are Standard Cauchy: A New Approach," *American Mathematical Monthly*, 2012, Vol. 119, No. 3, 240-244
- M. P. Cohen, "Discussion: Data-Driven Transportation Statistics," *2012 Proceedings of the Joint Statistical Meetings*, American Statistical Association, 1267-1270
- M. P. Cohen, Book Review of *Applied Latent Class Analysis* edited by Jacques A. Hagenaars and Allan L. McCutcheon, *Journal of Official Statistics*, 2011, Vol. 27, No.1, 139-141
- M. P. Cohen, "Sample Size Determination" and "Stratified Sampling." In *International Encyclopedia of Statistical Science* (M. Lovric, ed.), Springer, 2010
- M. P. Cohen, "Comment on Hyperefficient Estimators," (Letter to the Editor), *The American Statistician*, 2010, Vol. 64, No. 2, 192
- M. P. Cohen, "Discussion: Some Recent Studies in Transportation Statistics," *2010 Proceedings of the Joint Statistical Meetings*, American Statistical Association
- M. P. Cohen, "Discussion: Applications of Sampling," *2009 FCSM Research Conference*, Federal Committee on Statistical Methodology, <http://www.fcsm.gov/events/papers2009.html>
- R. Lee, M. P. Cohen, and F. Scheuren, "Imputation of Gaps in Transaction Sequences," *2009 Proceedings of the Joint Statistical Meetings*, American Statistical Association
- M. P. Cohen, "Discussion: Some Recent Developments in Transportation Statistics" *2009 Proceedings of the Joint Statistical Meetings*, American Statistical Association
- Z. Zhang, M. P. Cohen, and D. Wright, "Intraclass Correlation Patterns of Cognitive and Behavioral Measures of Illicit Drug Use Within Six Major Metropolitan Areas," *2008 Proceedings of the Section on Survey Research Methods*, American Statistical Association

- M. P. Cohen, "Auxiliary Variable," "Inference," "Proxy Respondent," "Raking," and "Unit Nonresponse." In *Encyclopedia of Survey Research Methods* (Paul J. Lavrakas, ed.), Volumes I and II, Thousand Oaks, CA: Sage Publications, 2008, pp. 45-46, 333-334, 633, 671-673, 927-928
- L. Giesbrecht, J. Bose, and M. P. Cohen, "Measuring Exposure to Vehicle Crashes," *Chance*, 2006, Vol. 19, No. 1, 22-27
- M. P. Cohen, "Some Thoughts on Fellows Program," (Letter to the Editor), *Notices of the American Mathematical Society*, 2006, Vol. 53, No. 10, 1182-1183
- M. P. Cohen, "The Order 5 General Bimagic Square," *Journal of Recreational Mathematics*, 2005-2006, Vol. 34, No. 2, 107-111
- M. P. Cohen, Solution to Problem 2683: "Smarandache Flitorial Functions," *Journal of Recreational Mathematics*, 2005-2006, Vol. 34, No. 2, 154
- M. P. Cohen, Solution to Problem 2685: "3-D Matchsticks," *Journal of Recreational Mathematics*, 2005-2006, Vol. 34, No. 2, 155
- M. P. Cohen, Solution to Editor's Question on Problem 2628: "Degree Two Equations," *Journal of Recreational Mathematics*, 2005-2006, Vol. 34, No. 1, 69
- M. P. Cohen, Solution to Problem 2679: "Fractured Rods," *Journal of Recreational Mathematics*, 2005-2006, Vol. 34, No. 1, 76-78
- M. P. Cohen, "Sample Size Considerations for Multilevel Surveys," *International Statistical Review*, 2005, Vol. 73, No. 3, 279-287
- L. Giesbrecht, J. Bose, and M. P. Cohen, "Developing Exposure Measures to Evaluate Vehicle Accident Risk," *2005 Proceedings of the Joint Statistical Meetings*, American Statistical Association, 1868-1873
- M. P. Cohen, "Discussion: Analysis of Call History to Improve Telephone Surveys—Survey Analysis Applications," *2004 Proceedings of the Joint Statistical Meetings*, American Statistical Association, 3373-3375
- L. Thurgood, E. Walter, G. Carter, S. Henn, G. Huang, D. Nooter, W. Smith, R. W. Cash, S. Salvucci, M. Seastrom, and M. Cohen, *NCES Handbook of Survey Methods: Technical Report*, Jessup MD: EDPubs, 2003
- M. P. Cohen, "Imputation Allowing Standard Variance Formulas," *Journal of Data Science*, 2003, Vol. 1, No. 3, 275-292

- J. Bose, J. N. Russell, L. H. Giesbrecht, and M. P. Cohen, "Characteristics of Nontelephone Households: A Supplement Survey of Two Travel-related Surveys," *2003 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 673-678
- M. P. Cohen, Solution to Problem 2537: "Morra," *Journal of Recreational Mathematics*, 2002-2003, Vol. 31, No. 3, 234-235
- M. P. Cohen, Solution to Problem 2494: "A Passing Truck," *Journal of Recreational Mathematics*, 2002-2003, Vol. 31, No. 1, 78-79
- M. P. Cohen, "Implementing Rao-Shao Type Variance Estimation with Replicate Weights," *Survey Methodology*, 2002, Vol. 28, No. 1, 97-101
- M. P. Cohen, "Imputation of Persons Not Interviewed in Household Travel Surveys," *2002 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 601-603
- M. P. Cohen, Additional Solution to Problem 25 from Problem Corner: "Special Agents in Afghanistan," *Chance*, 2002, Vol. 15, No. 4, 57
- M. P. Cohen, Solution to Problem 24 from Problem Corner: "Random Roots," *Chance*, 2002, Vol. 15, No. 3, 56-57
- M. P. Cohen, "Sample Size Considerations for Multilevel Surveys," *Bulletin of the International Statistical Institute*, 53<sup>rd</sup> Session Proceedings, 2001, 407-410, invited paper, Seoul
- M. P. Cohen, "Household Travel Surveys: Within Household Sampling?" *2001 Proceedings of the Joint Statistical Meetings*, American Statistical Association, 2 pages
- M. P. Cohen, "Sample Size Considerations for Multilevel Surveys," *Federal Committee on Statistical Methodology Research Conference*, 2001, Thursday, B Sessions, 75-79
- M. P. Cohen, Solution to Problem 20 from Problem Corner: "The Florida Election Recount," *Chance*, 2001, Vol. 14, No. 3, 59-60
- M. P. Cohen, "Note on the Odds Ratio and the Probability Ratio," *Journal of Educational and Behavioral Statistics*, 2000, Vol. 25, No. 2, 249-252
- M. P. Cohen, "Comment on the Cauchy Distribution and Trigonometric Formulas," (Letter to the Editor), *The American Statistician*, 2000, Vol. 54, No. 4, 326
- M. C. Bokossa, G. G. Huang, and M. P. Cohen, "Imputation of Test Scores in the National Longitudinal Study of 1988 (NELS:88)," *2000 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 191-196

- F. Zhang, S. Salvucci, and M. Cohen, "Multilevel Linear Regression Analysis of Complex Survey Data," *2000 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 197-202
- M. P. Cohen and G. G. Huang, "Analyzing Survey Data by Complete-Case and Available-Case Methods," *2000 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 289-294
- M. P. Cohen, Additional Solution to Problem 14 from Problem Corner: "A Characterization of the Bernoulli Distribution," *Chance*, 2000, Vol. 13, No. 2, 59-60
- M. P. Cohen, "More Mathematics in Its Place," (Letter to the Editor), *Mathematical Intelligencer*, 2000, Vol. 22, No. 1, 5
- M. P. Cohen, Book Review of *Bootstrap Methods and Their Application* by A. C. Davison and D. V. Hinkley, *Journal of Official Statistics*, 2000, Vol. 16, No. 1, 77-79
- M. P. Cohen, "Generating Heronian Triangles with Consecutive Integer Sides," *Journal of Recreational Mathematics*, 1999-2000, Vol. 30, No. 2, 121-124
- L. Kuo and M. P. Cohen, "Bayesian Analysis for Linearized Multi-Stage Models in Quantal Bioassay," *Biometrical Journal*, 1999, Vol. 41, 53-69
- M. P. Cohen, "Small Area Estimation for the Distribution of Parameters with Covariates," *1999 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 655-659
- M. P. Cohen, "Discussion on the Papers by Firth and Bennett, and Pfeffermann *et al.*," *Journal of the Royal Statistical Society, Series B*, 1998, Vol. 60, Part 1, 47
- M. P. Cohen, "Determining Sample Sizes for Surveys with Data Analyzed by Hierarchical Linear Models," *Journal of Official Statistics*, 1998, Vol. 14, No. 3, 267-275
- M. Hu, S. Salvucci, and M. P. Cohen, "Evaluation of Some Popular Imputation Algorithms," *1998 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 308-313
- M. P. Cohen, "Small Area Estimation for the Distribution of Parameters," *1998 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 345-348
- M. P. Cohen, Problem 2463: "Even Chance Revisited," *Journal of Recreational Mathematics*, 1998, Vol. 29, No. 4, 303
- G. G. Huang, S. Weng, F. Zhang, and M. P. Cohen "Outmigration Among Rural High School Graduates:

The Effect of Academic and Vocational Programs,” *Education Evaluation and Policy Analysis*, 1997, Vol. 19, No. 4, 360-372

F. Zhang, M. P. Cohen, and S. Salvucci, “An Empirical Study of Variance Estimates of Raking Ratio Adjusted Estimators,” *1997 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 535-540

M. Hu, F. Zhang, M. P. Cohen, and S. Salvucci, “On the Performance of Replication-Based Variance Estimation Methods with Small Number of PSUs,” *1997 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 541-546

S. Weng, S. Salvucci, and M. P. Cohen, “An Alternative Jackknife Procedure for NAEP Variance Estimation,” *1997 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 547-551

M. P. Cohen, “The Bayesian Bootstrap and Multiple Imputation for Unequal Probability Sample Designs,” *1997 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 635-638

M. P. Cohen, “A New Approach to Imputation,” *1996 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 293-298

M. Hu, S. Salvucci, S. S. Weng, and M. P. Cohen, “Evaluation of Proc Impute and Schafer’s Multiple Imputation Software,” *1996 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 287-292

G. G. Huang, M. P. Cohen, S. S. Weng, and F. Zhang, “Effect of High School Programs on Out-Migration of Rural Graduates,” *1996 Proceedings of the Section on Government Statistics*, American Statistical Association, 246-251

M. P. Cohen, “Sample Sizes for Survey Data Analyzed with Hierarchical Linear Models,” *1995 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 690-693

S. S. Weng, F. Zhang, and M. P. Cohen, “Variance Estimates Comparison by Statistical Software,” *1995 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 333-338

M. P. Cohen, “Does the Size of the Population Matter?” *Disseminations of the Third International Statistics in Industry Conference*, International Statistical Applications Institute, 1994, 94

M. P. Cohen, “Integrated Sampling of Education Institutions,” *1994 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 638-640

M. P. Cohen, “Discussion,” *Display of Environmental Data for Management*, *1993 Proceedings of the*

*Section on Statistics and the Environment*, American Statistical Association, 15-16

- D. Wright and M. P. Cohen, "National Assessment of Educational Progress (NAEP): Nonresponse Study," *1993 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 504-507
- M. P. Cohen, "Price Indexes for Institutions of Higher Education," *1992 Proceedings of the Business and Economics Statistics Section*, American Statistical Association, 282-285
- M. P. Cohen, "Position Statement," *The Future of Statistical Software: Proceedings of a Forum*, National Academy Press, 1991, 81
- M. P. Cohen, "Error Analysis of Estimates for Less-Than-Two-Year Postsecondary Education Institutions," *1990 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 511-514
- M. P. Cohen and P. E. Kroe, "National Estimates of Higher Education: School Year 1988-89," U.S. Department of Education, Office of Educational Research and Improvement, Publication CS 89-315, 1988, 10 pages
- S. G. Leaver, W. Weber, M. P. Cohen, and K. Archer, "Item-Outlet Sample Redesign for the 1987 US Consumer Price Index Revision," *Proceedings of the 46th Session of the International Statistical Institute*, 278-289, invited paper, Tokyo, 1987
- S. G. Leaver, W. Weber, M. P. Cohen, and K. Archer, "Determining an Optimal Item-Outlet Sample Design for the 1987 Consumer Price Index Revision," *1986 Proceedings of the Section on Survey Research Methods*, American Statistical Association, 499-504
- M. P. Cohen and L. Kuo, "The Admissibility of the Empirical Distribution Function," *Annals of Statistics*, 1985, Vol. 13, No. 1, 262-271
- M. P. Cohen and L. Kuo, "Minimax Sampling Strategies for Estimating a Finite Population Distribution Function," *Statistics and Decisions*, 1985, Vol. 3, 205-224
- M. P. Cohen and J. P. Sommers, "Evaluation of Methods of Composite Estimation of Cost Weights for the CPI," *1984 Proceedings of the Business and Economics Statistics Section*, American Statistical Association, 466-471

### **Awards**

Fellow, American Association for the Advancement of Science (AAAS), bestowed in 2015: "For significant statistical research, especially methods for designing large-scale federal surveys, and for fostering interdisciplinary communication through many years of generous service to professional societies."

Accredited Professional Statistician (PStat<sup>®</sup>), American Statistical Association, 2011 to present  
American Statistical Association Chapter Service Award, bestowed in 2010  
Fellow, American Educational Research Association, bestowed in 2009  
Member, Sigma Xi, elected in 2008  
Senior Member, American Society for Quality (ASQ)  
Elected Member, International Statistical Institute, elected in 2006  
Fellow, American Statistical Association, bestowed in 2004: “For technical contributions to a wide range of topics in survey research; for technical leadership within government organizations; and for outstanding service to the profession.”  
Cash Awards, National Center for Education Statistics, 1987, 1989, 1990, 1992, 1993, 1997, 1998, and 1999; Bureau of Transportation Statistics, 2003  
Quality Step Increases, National Center for Education Statistics, 1988, 1991, 1994, and 1996  
NCES Peer Recognition Award, Special Recognition, 1990  
NCES Peer Recognition Award, Organizational Distinction, 1992  
Fellow, Washington Academy of Sciences, bestowed in 1997  
President’s Award, Washington Statistical Society (WSS), 1999, “for outstanding service to the WSS”  
U.S. Department of Transportation EEO Award, 2001, for developing database and software for evaluation of the mediation program

### **Professional Societies**

American Statistical Association, Institute of Mathematical Statistics, International Association of Survey Statisticians, Transportation Research Forum, American Association for Public Opinion Research, Society for Industrial and Applied Mathematics, American Mathematical Society, Mathematical Association of America, INFORMS, American Educational Research Association, and others

### **Invited Talks, Chairing, and Discussing**

Invited talk, Conference on Bayesian Modeling, Computation, and Applications in Honor of Professor Lynn Kuo, University of Connecticut, Storrs CT, May 2018  
Discussant, Session on Latent Analysis with Surveys in Education Research, American Educational Research Association Annual Meeting, New York City, April 2018  
Discussant, Invited Session on Statistical Inference with Clustered Data in Survey Sampling, Joint Statistical Meetings, Chicago, August 2016  
Discussant, Session on Conducting and Validating Surveys, American Educational Research Association Annual Meeting, Washington DC, April 2016  
Discussant, Session on NAEP’s Role in Educational Achievement, American Educational Research Association Annual Meeting, Chicago, April 2015  
Discussant, Session on Measurement Issues in Survey Research, American Educational Research Association Annual Meeting, Chicago, April 2015  
Discussant, Session on Effect Sizes, Sample Sizes, and Power, American Educational Research Association Annual Meeting, Chicago, April 2015

Invited poster, Session on Celebrating Our Past Through Histories of ASA Sections, Chapters, and Committees, Joint Statistical Meetings, Boston, August 2014

Discussant, Session on Statistics in the Field: Innovative Applications and Investigations, American Educational Research Association Annual Meeting, Philadelphia, April 2014

Chairperson, Session on Measurement Issues in Survey Research, American Educational Research Association Annual Meeting, Philadelphia, April 2014

Discussant, Session on Measurement Issues in NAEP and Implications for the Interpretation of Results, American Educational Research Association Annual Meeting, Philadelphia, April 2014

Chairperson, Session on Using the National Assessment of Educational Progress (NAEP) to Develop and Inform Educational Indicators, American Educational Research Association Annual Meeting, San Francisco, April 2013

Discussant, Session on Methodological Issues in Survey Research, American Educational Research Association Annual Meeting, San Francisco, April 2013

Chairperson, Session on Evaluating Approaches for Addressing Missing Data, American Educational Research Association Annual Meeting, San Francisco, April 2013

Discussant, Session on Data-Driven Transportation Statistics, Joint Statistical Meetings, San Diego, July 2012

Chairperson, Session on Surveys of Children, Students, and Schools, Joint Statistical Meetings, San Diego, July 2012

Discussant, Session on Sampling for All Occasions, Federal Committee on Statistical Methodology Research Conference, Washington DC, January 2012

Invited talk, International Conference on Statistical Concepts and Methods for the Modern World, Colombo, Sri Lanka, December 2011

Chairperson, Session on Personalized Medicine and Convergence: Prospect for Statisticians, Joint Statistical Meetings, Miami Beach, August 2011

Invited talk, Transportation Research Board Annual Meeting, Washington DC, January 2011

Discussant, Session on Recent Studies in Transportation Statistics, Joint Statistical Meetings, Vancouver, August 2010

Discussant, Session on Applications of Sampling, Federal Committee on Statistical Methodology Research Conference, Arlington VA, November 2009

Discussant, Session on Recent Developments in Transportation Statistics, Joint Statistical Meetings, Washington, DC, August 2009

Chairperson, Session on Recent Developments in Transportation Statistics, Joint Statistical Meetings, Denver, August 2008

Discussant, Session on Topics in Estimation and Modeling for National and International Surveys, Federal Committee on Statistical Methodology Research Conference, Arlington VA, November 2007

Chairperson, Session on Sampling Issues and Variance Estimation, Joint Statistical Meetings, Salt Lake City, 2007

Chairperson and Organizer, Student Paper Award Session, Joint Statistical Meetings, Seattle, 2006

Invited talk, Joint Statistical Meetings, Minneapolis, August 2005

Chairperson, Session on Issues in Transportation Statistics, Joint Statistical Meetings, Minneapolis, August 2005

Discussant, Joint Statistical Meetings, Toronto, August 2004

Chairperson, Session on Estimating Variance in the Presence of Missing Data, Joint Statistical Meetings,

New York City, August 2002

Invited talk, 53<sup>rd</sup> Session of the International Statistical Institute, Seoul, August 2001

Discussant, Session on Use of Hierarchical Modeling in Substance Abuse Surveys, Washington Statistical Society, September 2000

Chairperson, Session on Sample Design, Design Effects, and Split Questionnaires, Joint Statistical Meetings, Indianapolis, August 2000

Discussant, Session on Alternate Response Modes, International Conference on Establishment Surveys II, Buffalo, June 2000

Discussant, Session on Analyses of National Data, American Educational Research Association Annual Meeting, New Orleans, April 2000

Discussant, Roundtable on Model Selection for Bayesian Networks, American Educational Research Association Annual Meeting, New Orleans, April 2000

Chairperson, Session on Applications of Structural Modeling, American Educational Research Association Annual Meeting, New Orleans, April 2000

Invited talk, Washington Statistical Society, December 1999

Discussant, Session on Bayesian Analysis of Mortality Rates, Washington Statistical Society, November 1998

Invited talk, Bureau of the Census Statistical Research Division Lecture Series, August 1998

Discussant, Session on "Multivariate Data Analysis Issues," Annual Meeting of the American Educational Research Association, Chicago, March 1997

Discussant, Session on Components of Variance for the Consumer Price Index, Washington Statistical Society, March 1996

Discussant, Session on System Understanding and Statistical Uncertainty Bounds for a Small Amount of Data, Washington Statistical Society, January 1995

Chairperson, Invited Paper Session on Remote Sensing, Joint Statistical Meetings, Toronto, August 1994

Chairperson/Organizer, Session on National and International Statistical Standards, Joint Statistical Meetings, San Francisco, August 1993

Discussant, Session on "Display of Environmental Data for Management," Joint Statistical Meetings, San Francisco, August 1993

Discussant, Session on "Using Monte Carlo Methods to Study Statistical Problems," Annual Meeting of the American Educational Research Association, Atlanta, April 1993

Chairperson, Session on Nonresponse Adjustment, Washington Statistical Society, February 1993

Chairperson, Session on New Technology for Establishment Surveys, Washington Statistical Society, November 1992

Discussant, Variance Estimation Seminar II, Washington Statistical Society, November 1991

Chairperson, Session on Statistical Theory and Methods, Mid-Atlantic Probability and Statistics Day, Washington, October 1990

Discussant, Session on Multivariate Methods, Annual Meeting of the American Educational Research Association, San Francisco, March 1989

Chairperson/Organizer, Session on Composite Estimation, Joint Statistical Meetings, Chicago, August 1986

Chairperson, Session on Nonparametric Estimation, Joint Statistical Meetings, Las Vegas, August 1985

Invited talk, Washington Statistical Society, November 1984

## Professional Offices

- Co-leader of the group on “Mathematics Beyond the MAA” of the Congress of the Mathematical Association of America (MAA), 2018-2019
- Elected by the Board of Directors to the Congress of the Mathematical Association of America as representative-at-large for business, industry, and government, 2018-2021
- Elected Treasurer, American Statistical Association Section on Survey Research Methods, 2015-2016
- Member, Mathematical Association of America Committee on Business, Industry, and Government (BIG) Mathematics, 2015-2018, reappointed for 2018-2021
- Elected Member of the Board of Directors, American Educational Research Association, Special Interest Group of Educational Statisticians, 2014-2015
- Member, American Statistical Association Committee on Archives and Historical Materials, 2011-2013, reappointed for 2014-2016, vice chairperson 2013-2016
- Member, American Statistical Association Professional Issues and Visibility Council, 2010-2011
- Consulting Editor/Reviewer, *Journal of Experimental Education*, 2010-present
- Elected Representative at Large, WINFORMS (DC Chapter of INFORMS, the operations research society), 2009-2010
- Member, ad hoc committee of the American Statistical Association on the organization of the research, statistics, and technology programs within the U.S. Department of Justice, 2008-2009
- President-Elect, Washington Statistical Society, 2006-2007; President, 2007-2008; Past President, 2008-2009
- Elected Program Chair, American Statistical Association Government Statistics Section, 2006
- Chair, American Statistical Association Committee on Representatives to the American Association for the Advancement of Science, 2005-2008, reappointed for 2008-2011
- Associate Editor, *Journal of the American Statistical Association*, Applications and Case Studies, 2004-2006
- Associate Editor, *Journal of Official Statistics*, 2003-present
- Member, Mathematical Association of America Committee on Mathematics and the Environment, 2004-2007
- Elected Treasurer for 2004 (Associate Treasurer in 2003), Washington DC / Baltimore Chapter of the American Association for Public Opinion Research
- Elected Publications Officer, American Statistical Association Section on Survey Research Methods, 2003-2004
- Member, Subcommittee on International Travel Behavior (A1C04(3)), Transportation Research Board, 2003-2006
- Member, Committee on Statistical Methodology and Statistical Computer Software in Transportation Research (A5011), Transportation Research Board, 2002-2005
- Member, Subcommittee on Census Data for Transportation Planning (A1D08(1)), Transportation Research Board, 2002-2006
- Member, Subcommittee on Behavioral Aspects of Freight Transportation (A1C04(5)), Transportation Research Board, 2002-2006
- Member, Federal Committee on Statistical Methodology Research Conference Planning Committee, 2002-2003 and 2004-2005
- Elected President, Washington Academy of Sciences, President-Elect 2002-2003, President 2003-2004

Elected Treasurer, Philosophical Society of Washington, 2002 term, re-elected 2003 term  
Member, Interagency Group on Establishment Nonresponse, 2002-2006  
Member, Intergovernmental Committee on the American Community Survey, 2001-2006  
Elected Corresponding Secretary, Philosophical Society of Washington, 2000-2001 term  
Elected Member at Large, Board of Directors, Philosophical Society of Washington, 1999-2000  
Term  
Elected Treasurer, American Educational Research Association Special Interest Group on National  
Databases, 1998-99 term, reelected 1999-2000 and 2000-2001 terms  
Elected Secretary, Washington Academy of Sciences, 1997-98 term; re-elected 1998-99 term and  
1999-2000 term  
Historian, Washington Statistical Society, 1996-2006  
Member, Board of Managers, Washington Academy of Sciences, 1996-present  
Elected Methodology Program/Section Chairperson, Board of Directors, Washington Statistical  
Society (WSS), 1993-1995 term, organized and chaired numerous WSS methodology sessions  
during this period  
Member, Membership Committee, Washington Statistical Society, 1992-93  
Appointed member, American Statistical Association Committee on National and International  
Statistical Standards, 1990-1992, reappointed for 1993-95, chairperson 1994-95  
Elected Representative-at-Large, Board of Directors, Washington Statistical Society, 1990-1992  
Term  
Member of Technical Advisory Group, National Center for Education Statistics, 1987-1989  
Bureau of Labor Statistics Statistical Seminar Committee Member, 1980-1984

### **Refereeing of Papers**

*Journal of Business and Economic Statistics, Annals of the Institute of Statistical Mathematics (Japan), Annals of Statistics (U.S.), Journal of Chemometrics, Survey Methodology (Canada), Journal of Educational and Behavioral Statistics, Journal of the Washington Academy of Sciences, Drug and Alcohol Dependence, Journal of the American Statistical Association, Journal of Official Statistics, Biometrical Journal, papers for the annual meetings of the American Educational Research Association, Journal of Transportation and Statistics, Communications in Statistics, papers for the annual meetings of the Transportation Research Board, Psychological Methods, International Journal of Public Opinion Research, Structural Change and Economic Dynamics, Journal of Statistics Education, Accident Analysis and Prevention, The American Statistician, Journal of Experimental Education, Education Policy, Journal of Survey Statistics and Methodology, WIRES Computational Statistics, Statistical Journal of the International Association for Official Statistics, Journal of Research on Educational Effectiveness*