



NOVEMBER 1989

WASHINGTON
STATISTICAL
SOCIETY

NEWSLETTER

Nov. 7	Tues.	A Profile of the Working Poor
Nov. 15	Wed.	CPI Users Survey: Methodology and Results
Nov. 29	Wed.	The Geography of Violence
Nov. 30	Thurs.	Applied Econometrics: Adjusting Variances of Asymptotic Normal Estimators from Complex Surveys
Dec. 7	Thurs.	A Statistical Edit Using Tukey's Biweight
Dec. 12	Tues.	Model-Based Sample Design and Estimation Procedures (Tutorial)
Dec. 13	Wed.	<i>Washington Statistical Society Holiday Party</i>

ANNOUNCEMENTS

SIPP Products Available

The Survey of Income and Program Participation (SIPP) Working Paper Series, the P-70 Reports, compilations of SIPP-related papers presented at the 1988 Annual Meeting of the American Statistical Association, and public-use data files are now available. For copies of the working papers, the 1988 compilation, or generation information about products that are available, please call either Hazel Beaton or Debra Gannion at (301) 763-8328 or write: Daniel Kasprzyk, Chief, SIPP Research and Coordination Staff, Office of the Director, SHEP, Suite 2A, Bureau of the Census, Washington, D.C. 20233.

For a list of public-use data files now available through the Data Users Services Division, Customer Services Branch, of the Census Bureau, call (301) 763-4100.

For some feeling of the content of the P-70 Reports, three reports (chosen by the editor) that might be of general interest are:

1. "Short-Term Fluctuations in Income and Their Impacts on the Characteristics of the Low-Income Population: New Data From the Survey of Income and Program Participation," by P. Ruggles.
2. "Quality of SIPP Estimates," by R.P. Singh, L. Weidman, and G. Shapiro.
3. "The Economic Resources of the Elderly," by S. Crystal and D. Shea.

Statistics on TV

Against All Odds - Inside Statistics, a college-level introduction to statistics, is currently airing every Monday at 1:00 p.m. on Channel 32, WHMM-TV. Each show lasts 30 minutes. The series has 26 segments; they began on September 4.

WASHINGTON STATISTICAL SOCIETY PROGRAM CHAIRS

Agriculture & Natural Resources

Cynthia Clark 763-8558
Paul Gargiullo 586-1137

Social & Demographic Statistics

Harvey Schwartz 443-6990
John Czajka 484-9220

Short Courses

Glenn White 763-7524
Donald Gantz 764-6565
Brad Pafford 447-3623
Sid Schwartz 268-3490

Economics

John Ruser 523-1347
Neil Ericsson 452-3709

Methodology

Myron Katzoff 436-7047
Andrew White 436-7904

Public Health & Biostatistics

Ed Lakatos 496-5905
Jai Choi 436-7047

Physical Sciences & Engineering

Patricia Abel 883-6490
Refik Soyur 994-6794

Statistical Computing

Khalid Aboura 994-6794
Sylvia Leaver 272-2350

Quality Assurance

Stanley R. Freedman 586-2038
John Galvin 272-5066

Newsletter Editor

Michael Cohen 454-6193

Employment

Bill Arends 447-6812

PROGRAM ABSTRACTS

TOPIC: A PROFILE OF THE WORKING POOR
SPEAKER: Bruce W. Klein, Bureau of Labor Statistics
CHAIR: Denton R. Vaughan, Social Security Administration
DISCUSSANT: Daniel H. Weinberg, Bureau of the Census
DATE & TIME: Tuesday, November 7, 1989; 12:30 to 2:00 p.m.
LOCATION: Room 2437, GAO Building, 441 G Street, N.W., Washington, D.C.
SPONSOR: Social and Demographic Statistics Section
ABSTRACT: Recently, there has been great interest in persons who are in the work force but live in families with incomes below the poverty level. This seminar will explore the demographic characteristics, employment problems, and earnings of the working poor, defined as those in the labor force a half year or more but living in families with incomes below the poverty level. Data are derived from the March, 1988, Current Population Survey. Poor workers are compared to nonpoor workers based on race, sex, age, family relationship, and living arrangements. Family structure and the number of earners in poor families with workers are examined. Employment problems under investigation are unemployment, involuntary part-time work, and low earnings—a low pay measure based on the average real value of the minimum wage during 1967-87.

TOPIC: CPI USERS SURVEY: METHODOLOGY AND RESULTS
SPEAKER: Richard Kamalich, Bureau of Labor Statistics
CHAIR: Stanley R. Freedman, Energy Information Administration
DATE & TIME: Wednesday, November 15, 1989; 12:30 to 2:00 p.m.
LOCATION: Rm. 2736, GAO Building, 441 G Street, N.W., Washington, D.C.
(Sign in at guard desk and state purpose and room number of visit.)
SPONSOR: Quality Assurance Section
ABSTRACT: In the Fall of 1988 the Bureau of Labor Statistics surveyed a sample of users of the Consumer Price Index. Measurement objectives of the survey were: (1) to develop a CPI usage profile, or to identify which CPI data are used for what purposes; (2) to gain user feedback on the quality of CPI information services; and (3) to gain user opinions on the usefulness of a number of prospective CPI program and methodological changes. This paper presents results of the survey and discusses policy implications. Various aspects of the survey design are also discussed including questionnaire development, sample design, frame construction, data collection (mail survey with telephone follow-up), and nonresponse.

TOPIC: THE GEOGRAPHY OF VIOLENCE
SPEAKER: Keith D. Harries, University of Maryland, Baltimore County
CHAIR: Charles Croner, National Center for Health Statistics
DATE & TIME: Wednesday, November 29, 1989; 2:00 to 3:00 p.m. (Note special time.)

PROGRAM ABSTRACTS (continued)

LOCATION: National Center for Health Statistics, Center Building, Room 139, 3700 East-West Highway, Hyattsville, Maryland 20782

SPONSORS: Office of Research and Methodology, NCHS, and the Methodology Section, WSS

ABSTRACT: Violence has become a significant public health concern in recent years. A dramatic upturn in rates of drug-related violence in inner cities has added new urgency to the need for remediation. The development of coherent policy and programs aimed at violence reduction is confounded by various issues, including the definition, measurement, and scale of violence. This presentation will focus on spatial patterns of violence and the apparent causes associated with these patterns.

TOPIC: **APPLIED ECONOMETRICS: ADJUSTING VARIANCES OF ASYMPTOTIC NORMAL ESTIMATORS FROM COMPLEX SURVEYS**

SPEAKER: Richard F. Nehring, Economic Research Service, U.S. Department of Agriculture

CHAIR: Anna Aizcorbe, Office of Economic Research, U.S. Bureau of Labor Statistics

DISCUSSANT: Phil Kott, National Agricultural Statistics Service, U.S. Department of Agriculture

DATE & TIME: Thursday, November 30, 1989; 1:30 to 3:00 p.m. (Note special time.)

LOCATION: Rm. 2736, GAO Building, 441 G Street, N.W., Washington, D.C.
(Sign in at guard desk and state purpose and room number of visit.)

SPONSOR: Economics Section

ABSTRACT: The problem of specifying and estimating the variances of estimated parameters based on complex sample designs is considered. The complex survey used is the United States Department of Agriculture's annual Farm Costs and Returns Survey (FCRS). Econometric models using FCRS data may potentially be applied to address a number of policy issues. For example, econometric estimates of input price elasticities and technical efficiency by size and input size may provide results that suggest ways to target or adjust farm programs. It is shown how to use available software for variance estimation for several econometric models.

TOPIC: **A STATISTICAL EDIT USING TUKEY'S BIWEIGHT**

SPEAKER: Catherine Mazur, National Agricultural Statistics Service, USDA

CHAIR: Jack Galvin, Bureau of Labor Statistics

DISCUSSANT: Michael Welch, Energy Information Administration

DATE & TIME: Thursday, December 7, 1989; 12:30 to 2:00 p.m.

LOCATION: Room 4302, USDA South Building, Metro: Smithsonian exit (Independence Ave.)

SPONSOR: Quality Assurance Section

ABSTRACT: A microcomputer-based statistical edit and imputation procedure is being developed for livestock slaughter data. A weekly census of plants is conducted which allows the statistical edit to be based on individual plant historical data. In addition to determining edit limits, Tukey's biweight will be used to impute missing values. A strata biweight will be used to edit and impute data for plants with insufficient data.

ANNOUNCEMENTS (continued)

Demo of DBMS\Copy at SIGSTAT Meeting

SIGSTAT is the Special Interest Group in Statistics in the Capital PC Users Group. The November meeting of SIGSTAT will feature a demo of DBMS\COPY 2.0. This software package is of interest to anyone who deals with data sets from a variety of statistical, database and/or spreadsheet packages and wants an easy way to move data between them. Simply issuing the DBMSCOPY command instead of the DOS COPY command does the trick. The file extensions identify the origin of the target and source files. For example, DBMSCOPY TEST.DB TEST.SYSTAT will copy the Paradox file test.db to the SYSTAT file with the DOS name of test.sys.

The meeting is scheduled for Wednesday, November 15, from 12:30 to 1:30 p.m. in Room B-14, 1301 New York Avenue, N.W. The building is located midway between the Metro Center and McPherson Square Metro stops. If this is your first SIGSTAT meeting, call Charlie Hallahan, 786-1507, and leave your name in order to gain entry into the building.

Honoring the ASA 150 at the National Academy of Sciences

A symposium on A Guide to Assessing Societal Risk will be held at the National Academy of Sciences Building, 21st and C Streets, N.W., Washington, D.C., on November 29, 1989 from 2:00 to 5:30 p.m. This talk is presented by the Committee on Applied and Theoretical Statistics, of the Board on Mathematical Sciences, National Research Council and commemorates the sesquicentennial of the American Statistical Association. This symposium is sponsored by the American Statistical Association, the Biometric Society, and the Institute of Mathematical Statistics. For registration information, contact the Board on Mathematical Sciences at (202) 334-2421.

Fellowship Announcement

American Statistical Association/National Science Foundation/Census Bureau Research Fellowships and Associateships will again be offered to conduct research at the Census Bureau. These fellowships provide a unique opportunity to make major advances in methodological or subject matter research related to Census Bureau operations or data. General areas for research include statistical methodology and computing, social and demographic studies, and economic measurement and analysis. Requirements are: for Fellows, recognized research record in relevant field (e.g., Statistics, Demography, Sociology, Economics, Geography); for Associates, at least two years of graduate study (or equivalent) in relevant field plus computer experience. Salaries are commensurate with qualifications and experience; also, fringe benefits and a travel allowance are provided. Length of term and starting date are flexible—usually six months to a year beginning September 1. Fellows and Associates can start as early as June 1, 1990, and terms can be split into two or more parts. Please apply by January 5, 1990 for Fellows and February 15, 1990 for Associates. For information on specific research topics and on how to apply, contact Dr. William Bell, Room 3000-4, Statistical Research Division, Bureau of the Census, Washington, D.C. 20233 (301/763-3957).

Census Bureau's 1990 Annual Research Conference Announced

The Census Bureau's 1990 Annual Research Conference (ARC 1990) will be held March 18-21, 1990, at the Holiday Inn Crowne Plaza in Arlington, Virginia, only 1/2 mile from National Airport and three blocks from Metro. ARC 1990 will comprise a mix of topics such as reconciling foreign trade estimates between countries, disclosure avoidance, imputation methodology, behavioral research on the census undercount and more. For further information contact Ms. Maxine Anderson-Brown, ARC Conference Coordinator, Office of the Director, Bureau of the Census, Washington, D.C. 20233, 301/763-1150.

ANNOUNCEMENTS (continued)

Science Fairs 1990

Volunteers are still needed to serve as WSS judges for local area science fairs. If you would like to be a WSS science fair judge, or if you would like additional information about this activity, please contact Susan Ellenberg at (301) 496-0694; or send a note with your name, address, and daytime telephone number to: Susan Ellenberg, AIDS Program, NIAID, 6003 Executive Boulevard, Rockville, Maryland 20892.

1989 Winter Simulation Conference

Preliminary programs are available for the 1989 Winter Simulation Conference, which will be held on December 4-6, 1989 at the Capital Hilton Hotel in Washington, D.C. A copy of the WSC '89 Preliminary Program, which includes a list of speakers and papers as well as registration and hotel information, can be obtained by contacting Publicity Chair Barry L. Nelson, Department of Industrial and Systems Engineering, The Ohio State University, Columbus, Ohio 43210; (614) 292-0610; nelson-b@eng.ohio-state.edu.

Discrete-event simulation, which is the focus of the conference, is the most widely used tool for the design and analysis of systems subject to uncertainty, such as manufacturing, transportation, distribution, computer, communication, military, and health care systems. WSC '89 will feature introductory and advanced tutorials on simulation modeling and analysis, software tutorials describing new products and features, and research sessions on analysis methodology, modeling methodology, simulation in manufacturing, and general simulation applications. Each tutorial and research session is supported by a paper published in the conference proceedings, which is available during conference registration. The software tutorials are backed up by an extensive vendor exhibits area for demonstrations and further discussion.

The keynote address will be given by A. Alan B. Pritsker, Chairman of the Board of Pritsker Corporation, and is entitled "Why Simulation Works." Other conference events include a pre-conference Ph.D. student colloquium and a post-conference tour of the National Institute of Standards and Technology's Advanced Manufacturing Research Facility.

EMPLOYMENT COLUMN

The Washington Statistical Society is greatly indebted to Evelyn Kay for her generous contribution of time organizing, editing, and collecting ads for the employment service included at the end of this newsletter. This service has provided jobs and candidates for jobs for many years to statisticians and statistical agencies in the Washington area. Now that Evelyn has decided to step down as organizer of this service, the difficult task of maintaining her example of excellence falls to Bill Arends. If you have a job opening or are available for a new position, please call him at 447-6812.

JOB OPENINGS

BIostatisticians, Clinical Information Specialists

Experienced Biostatisticians are in demand for positions in clinical research for the pharmaceutical industry. To inquire about opportunities which may be of interest to you in the Washington, D.C. metropolitan area or across the U.S., please send a resume of your background to: **Henry Keller, Merlin International, Inc., P.O. Box 313, Ramsey, NJ 07446** or call directly 1-800-525-7483 (FAX 201-825-1043).

JOB OPENINGS (continued)

BIostatistician

Children's National Medical Center announces an opening for a Biostatistician in the Office of the Research Director. This person will provide statistical consultation on a variety of research projects for clinical faculty and staff.

Responsibilities include:

- Review of protocols
- Design of clinical trials and laboratory experiments
- Analysis of data
- Preparation of reports
- Conducting seminars

The position requires a Ph.D. in biostatistics, statistics, or epidemiology, with at least two years of consulting experience in an academic or medical environment. Experience using statistical software (e.g., BMDP, SAS, SPSS) is essential. Knowledge of a scientific programming language (e.g., FORTRAN) is preferred.

The position offers opportunities for an academic appointment to the George Washington University School of Medicine and for pursuing an individual course of research. For information contact P. Getson at 202-745-3323 or send resume to: Nick Piazza, Human Resources, C.N.M.C., 111 Michigan Avenue, N.W., Washington, D.C. 20010.

MATHEMATICAL STATISTICIAN - GS-13 or GS-14

The Biometry Branch of the Prevention Research Program of the National Institute of Child Health and Human Development (NICHD) has two mathematical statistician positions available. These positions are at the GS-1529-13 (salary range \$41,121 to \$53,460) or GS-1529-14 level (salary range \$48,592 to \$63,172) depending on qualifications and experience. Responsibilities include providing statistical consultation on research projects of the Prevention Research Program and other components of the NICHD in national and international investigations and research on the development of statistical methods. The positions require a Ph.D. in statistics or biostatistics with strong emphasis on mathematics or equivalent training and experience. Candidates must have a proven research record reflected in scientific publications. Interested candidates may contact Dr. Young Jack Lee, Chief, Biometry Branch, Prevention Research Program, NICHD, (301) 496-6811 or Ms. Mary Glynn, Personnel Specialist, Office of Personnel, NICHD, (301) 496-3365 or send applications consisting of curriculum vitae and form SF-171, Application for Federal Employment, to: Ms. Glynn, Bldg. 31, Room 2A25, NICHD, NIH, 9000 Rockville Pike, Bethesda, Maryland 20892, An Equal Opportunity Employer.

STATISTICIAN, BIOSTATISTICIANS

Science Applications International Corporation (SAIC), an employee-owned company, has immediate openings for M.S. level statisticians on environmental and epidemiologic studies. Successful candidates must have strong written and verbal communication skills and experience with statistical software packages (e.g., SAS, BMDP, SYSTAT). Salary commensurate with experience. SAIC offers an excellent competitive benefits package. Send resume and salary requirements in confidence to: SAIC, Attention: Dr. Russell H. Roegner, 8400 Westpark Drive, McLean, VA 22102.

JOB OPENINGS (continued)

OPERATIONS RESEARCH/MATHEMATICAL STATISTICS/APPLIED MATHEMATICS

The Directorate of Intelligence in the Central Intelligence Agency studies foreign policy and national security issues for senior policymakers in the U.S. government. A small internal consulting group performs quantitative analyses for Directorate of Intelligence. Members of this group devise novel statistical, operations research, and applied mathematical techniques to contribute to a variety of intelligence problems, such as arms control monitoring issues, agricultural crop production estimation, and technology transfer issues. This group currently has one or more openings. Successful candidates will have or be near completion of a Ph.D. in statistics, operations research, applied mathematics, or a related field; a working knowledge of FORTRAN or an equivalent language; and the ability to present ideas clearly to nontechnical clients. Strong candidates with all degree requirements except for completion of dissertation will also be considered. If the candidate desires, opportunities exist for travel and continuing education. U.S. citizenship is required. Starting salary ranges from \$30,000 to \$45,000, depending on education and experience. All applicants must successfully complete medical, security, and polygraph examinations. Forward resume and graduate transcript to: **Office of Information Resources, (CI29), STAT/OR, Central Intelligence Agency, Washington, D.C. 20505.** We will respond within 30 days to those judged to be of further interest. The CIA is an equal opportunity employer.

GENERAL STATISTICIANS - GS-13 or GS-14

The Rehabilitation Services Administration, U.S. Department of Education, has two job openings for general statisticians. One is at the GS-14 level, the other at the GS-13 level. The work involves the development and maintenance of statistical reporting systems, the analysis and evaluation of various facets of the vocational rehabilitation (VR) program on the basis of data reported by 83 State VR agencies, and the dissemination and presentation of the results to a wide variety of data users. Candidates should have experience in all facets of survey methodology and the application of statistical techniques in analyzing and evaluating program operations and trends, and knowledge of microcomputer software for data processing and analysis purposes. Call Ann Weinheimer at 202-732-1345 for application information.

MATHEMATICAL STATISTICIANS (GS11/12/13)

The Biometrics Branch of the Center for Veterinary Medicine, Department of Health and Human Services, is seeking two Ph.D. mathematical statisticians to provide mathematical and statistical support to the research and regulatory activities of the Center. The positions involve reviewing and evaluating mathematical and statistical methods, procedures and concepts involved with new animal drug applications along with supporting tests, research, and clinical data. Oral and written communication skills are important. Proficiency in the use of personal computers and knowledge of SAS is helpful. Send SF-171 application forms and resume to: **Dr. James J. Colaianne, Chief, Biometrics Branch, Center for Veterinary Medicine, Room 6 B-21, 5600 Fishers Lane, Rockville, MD 20857 or call 301/443-1580** for additional information.

JOB APPLICANTS

Listed below is a brief description of the qualifications of an applicant seeking employment. Employers interested in interviewing this applicant should notify Mr. Arcends of their interest by CODE NUMBER. The request should be by mail and should include the employer's name, organization, and telephone number. The applicant will be notified of the employer's interest and initiation of any further contact will be left to the applicant. All contacts will be confidential.

CODE #90-01

Objective: Application of econometrics and advanced forecasting techniques to any suitably difficult subject matter.

Experience: Forecasts of automobiles, electricity, furniture, savings, long distance telephone calls, chemicals and plastics, and the results of oil exploration. Fifteen years of progressively increasing responsibility as an econometrician, forecaster, analyst, and researcher into the methods and empirical applications of statistics to economics.

Expertise: Application of artificial intelligence to forecasting, integration of economics with statistics, application of numerical methods to econometric analysis. Accomplished writer and public speaker.

Computers: PC expert, a decade of mainframe experience, numerous computer languages, and canned programs.

Education: Ph.D., University of Michigan, Ann Arbor, 1982.
Fields: econometrics, statistics, regulated industries.

CODE #90-02

Position wanted: Mathematical Statistician, Grade 13 or 14

Education: M.A. in Statistics, B.A. and Ph.D. in the Social Sciences

Experience: Strong background in survey design, survey measurement errors, development of computer-assisted data collection methods, questionnaire development through experimental and field methods, survey quality control



P.O. Box 70843
Washington, D.C. 20024-0843

NON-PROFIT ORG.
U. S. POSTAGE
PAID
FALLS CHURCH, VA.
PERMIT NO. 186