

Washington Statistical Society

CHAPTER • AMERICAN STATISTICAL ASSOCIATION
WSS Newsletter—October 1983

CALENDAR

TOPIC: SUDS, A Survey Data Processing System for Micros
SPEAKERS: Frederick Baker and Ronald J. Steele, U.S. Dept of Agriculture
CHAIR: Chap Gleason, U.S. Department of Justice
DATE AND TIME: Wednesday, October 12, 1983; 12:30-2:00 P.M.
LOCATION: Rm 1G-071, Forrestal Building, 1000 Independence Ave. S.W.,
Washington, D.C.

TOPIC: Health Characteristics of Veterans and Non-Veterans
SPEAKER: William Page, Veteran's Administration
DISCUSSANT: Robert Fuchsberg, National Center for Health Statistics
DATE AND TIME: Wednesday, October 19, 1983; 12:30-2:00 P.M.
LOCATION: Room 119, 810 Vermont Avenue, N.W., Washington, D.C.

TOPIC: Graphical Methods for Assessing Logistic Regression Models
SPEAKER: Anne Shoemaker, Bell Laboratories
CHAIR: L.A. Thibodeau, Applied Management Sciences
DATE AND TIME: Thursday, October 20, 1983; 12:30-2:00 P.M.
LOCATION: Room GJ-015, Forrestal Building, 1000 Independence Ave. S.W.,
Washington, D.C.

TOPIC: Joint Session on Imputation Methods
SPEAKERS: Susan Hinkins, Internal Revenue Service and Michael Samuhel, ASA/Census
CHAIR: John Greenlees, Bureau of Labor Statistics
DATE AND TIME: Tuesday, October 25, 1983; 12:30-2:00 P.M.
LOCATION: Room GJ-015, Forrestal Building, 1000 Independence Ave. S.W.,
Washington, D.C.

TOPIC: The Fourth Dimension and Computer Animated Geometry
SPEAKER: Thomas F. Banchoff, Brown University
CHAIR: Edward Wegman, Office of Naval Research
DATE AND TIME: Thursday, October 27, 1983; 12:30-2:00 P.M.
LOCATION: George Washington University, Marvin Ctr. Rm 410-415, 800-21st St. N.W.,
Washington, D.C.

TOPIC: Issues in Revising the Federal Retirement System
SPEAKERS: Representatives of Congressional Committees and Federal Employers
CHAIR: Dave Delquadro, Congressional Budget Office
DATE AND TIME: Friday, October 28, 1983; 12:30-2:00 P.M.
LOCATION: Room GJ-015, Forrestal Building, 1000 Independence Ave. S.W., Washington,
D.C.

UPCOMING PROGRAMS

NOVEMBER Workshops on Improving the Quality of Federally Funded Surveys

DECEMBER Birthday/Holiday Program for Morris Hansen

PROGRAM ABSTRACTS

TOPIC: SUDS, A Survey Data System for Micros

ABSTRACT: The USDA has developed a microcomputer software package which facilitates easy data entry, data editing, and summarization capability. The system is written in North Star BASIC and has been installed in eight lesser developed countries and utilized to obtain agricultural and economic statistics. SUDS will be discussed and demonstrated for a typical agricultural survey.

TOPIC: Health Characteristics of Veterans and Non-Veterans

ABSTRACT: This presentation compares Veteran and Non-Veteran health characteristics such as hospitalization, physician visits, and days lost from work. The data comes from the National Health Interview Survey conducted by the National Center for Health Statistics during 1971-1981. There are minimal differences in age-adjusted rates between Veterans and Non-Veterans. However, Veteran's Administration health care users do differ from non-users on many characteristics.

TOPIC: Graphical Methods for Assessing Logistic Regression Models

ABSTRACT: In ordinary linear regression, graphical diagnostic displays can be useful for detecting and examining anomalous features in the fit of a model to data. For logistic regression models, the discreteness of binary data makes it difficult to interpret such displays. Modifications and extensions of linear model displays lead to three methods for diagnostic checking regression models: Local mean deviance plots, Empirical probability plots and Partial residual plots. This session discusses these methods and illustrates them through the analyses simulated and real data.

TOPIC: Joint Session on Imputation Methods

ABSTRACT: Two papers will be presented in this session. The first paper, "Matrix Sampling and the Related Imputation of Corporate Tax Returns" is presented by Susan Hinkins. It describes a stratified sampling procedure developed to account for errors introduced into the data as the result of the manual, abstraction of data from sub-sampled records. For records not selected, an estimate of the change that might otherwise have occurred is imputed. The second paper, "Alternate Models for CPS Income Imputation" is presented by Michael Samuhel and described the methods used to imput earnings recipiencies and amounts for non-respondents in the Income Supplement of the Current Population Survey. The methods involve logistic regression models for recipiency, analysis for weeks worked and linear regression models for log (earnings). Problems in modelling a large hetrogeneous survey sample are also addressed.

TOPIC: The Fourth Dimension and Computer Animated Geometry

ABSTRACT: Interactive computer graphics makes it possible for the research mathematician to carry out direct visual investigation of mathematical phenomena which previously could be approached only indirectly and incompletely using formal and abstract techniques. Topics especially well adapted to such methods are those which involve objects undergoing deformations, especially near critical positions where the qualitative behavior changes drastically. Some of the most dramatic successes of this approach arise in the attempts to visualize geometric phenomena in higher dimensions, particularly the Fourth Dimension. Computer animated films and slide sequences will illustrate the ways various graphic techniques provide new insights into the study of topics such as knotted curves, minimal surfaces, regular polyhedra in 4-space, graphs of complex functions, and non-orientable surfaces, such as the Klein bottle and the real projective plane.

TOPIC: Issues in Revising the Federal Retirement System

ABSTRACT: Concerns about the retirement system for Federal civilian employees have led to legislative proposals for revision. At this session, a panel of Congressional staff and others who are actively involved in the legislative process will discuss the issues to be considered in revising the system and developing a new one integrated with Social Security, and then examine current proposals for change. Ample time for audience participation will be provided.

WORKSHOPS ON FEDERALLY FUNDED SURVEYS

Professional statisticians and survey researchers have been greatly concerned in recent years about the deteriorating quality of surveys conducted under Federal sponsorship. One of the key points of failure has been a lack of understanding and appreciation by Federal contract officers and project monitors concerning the intricacies of conducting high quality surveys. Last year the Washington Statistical Society sponsored a highly successful three-half-day workshop for Federal project monitors and contract officers, in order to help them conduct their difficult task better. They are again scheduled to conduct the workshops for those who could not attend last year or who missed one or two of the meetings. The purpose of the workshops is not to make these persons qualified statisticians and survey researchers, but rather to help them understand the details of survey research better and to point out things they should look for in monitoring survey projects.

These free workshops will be held on three consecutive Monday afternoons in November, in the Internal Revenue Service Auditorium, 12th & Constitution Avenue, N.W., Washington, D.C. The tentative schedule is as follows:

Monday, November 14 (1-4 p.m.) - A workshop on the design of surveys (research design, sample design and questionnaire design) and fieldwork (personal interviews, telephone interviews and self-administered questionnaires).

Monday, November 21 (1-4 p.m.) - A workshop on data processing (receipt, coding and editing, input and computer tabulation) and analysis of results (statistical analysis and modelling, interpretation of results, and presentation of results).

Monday, November 28 (1-4 p.m.) - A workshop on preparing study requirements and writing a Request for Proposal.

This notice serves two purposes:

- (1) Members of the Washington Statistical Society are invited to attend the Workshops.
- (2) Members of the WSS are asked to distribute this notice to non-members who are known to be interested in Federally-sponsored survey research projects.

The workshop is considered to be vital to all those involved with Federally-funded survey research. For further details, contact Mr. Donald W. King or Ms. Helen Kurtz, King Research Inc., (881-6766) 6000 Executive Boulevard, Rockville, Maryland 20852.

HOLIDAY PARTY TO CELEBRATE MORRIS HANSEN'S BIRTHDAY

On December 15 the Washington Statistical Society will hold a wine and cheese party to commemorate Morris Hansen's 73rd birthday and celebrate the holiday season. We would like all statisticians in the Washington area to join us on this happy occasion.

The wine and cheese party will be held at the Marvin Center of George Washington University from 5:30 to 8:30 on Thursday, December 15. Reservation forms will appear in the November WSS Newsletter.

NATIONAL CENTER FOR HEALTH STATISTICS SEMINAR

TOPIC: Problems Arising In The Use of Combined Test Significance
SPEAKER: Joseph Gastwirth, George Washington University
DATE & TIME: Tuesday, October 28, 1983; 11:00-12:00 P.M.
LOCATION: Center Building, Room 7-32, 3700 East-West Highway, Hyattsville, Maryland

ABSTRACT: The talk will describe the use and misuse of combination methods, e.g., Mantel-Haenszel and Fisher's procedures in analyzing data from equal employment cases. The robustness properties of the Mantel-Haenszel and related methods for combining several 2 x 2 tables will be discussed.

INTERNAL REVENUE STATISTICS OF INCOME SEMINAR

TOPIC: Statistics of Income: 1980 Corporate Tax Returns
DATE & TIME: Thursday, October 6, 1983; 1:00-2:00 P.M.
LOCATION: Room 806A, 1201 E Street, N.W., Washington, D.C.

ABSTRACT: This seminar highlights the IRS statistical report on Corporation Income Tax Returns. Speakers include Tim Wheeler, Joe Voith, Janice Washington and David Jordan.

AMERICAN SOCIETY OF ACCESS PROFESSIONALS SYMPOSIUM (ASAP), NOVEMBER 3 & 4, 1983

ASAP Will sponsor a two-day international symposium on access laws entitled "Perspectives On The Information Society: Premises, Promises and Problems". The sessions cover privacy, confidentiality and disclosure issues. Admission is \$135.00 for ASAP members; \$175 for non-members. For additional information contact Hugh O'Neill, (202) 472-7453.

FRIENDS OF SHIRLEY KALLEK

To memorialize Shirley Kallek's life and her professional and personal contributions, her friends and colleagues are establishing a memorial fund to endow an annual Fellowship. The award will be made each year to a qualified woman to pursue the study of statistics. Contributions may be submitted to: Helen Peck, Council of Professional Associations on Federal Statistics, 806-15th Street, N.W., Suite 440, Washington, D.C. 20005.

CALL TO GOVERNMENT AGENCIES FOR PROBLEM FOR COMPETITION IN DATA ANALYSIS

The Methodology Section of the Washington Statistical Society is planning a competition in data analysis. If a suitable problem can be identified, it will be made available to interested analysts in the Washington area. Upon submission, given an adequate response, the analyses will be judged and the winners announced and given the opportunity of presenting their results at a joint meeting of the WSS.

We are asking government agencies to provide the suitable problem. This problem must be typified by the analysis of a data set with fewer than 250 observations and six variables per observation so that the data set can be entered by hand into a computer system.

As a result, we expect that a government agency will receive a well-thought-out answer to an interesting problem and some analysts will receive recognition for their efforts in solving the problem. For additional information contact Michael Cohen (301) 585-8181.

EMPLOYMENT COLUMN

Deadline for inserting notices is the first of the month preceding the publication date.

Send notices and requests to:
Evelyn R. Kay
520-22nd Street, N.W.
Washington, D.C. 20037
202/331-1153

JOB OPENINGS

The National Center for Health Statistics has the following positions available:

- GS-14 (Supervisory): Experience in developing and analyzing epidemiological data preferred.
- GS-12/13: Background in statistics, facility in computer packages and knowledge in medical related sciences desired.
- Math-Stat 12/13: Knowledge of sampling and survey methods, computer programming and software packages is required. Position closes October 15, 1983

Interested individuals should contact Cynthia Wroblewski on 436-7104 concerning the first two positions and Iris Shimizu on 436-7022 concerning the latter position.

The Veteran's Administration has the three following positions available:

- GS-1530-7/9/11: Prepares reports, develops indices and evaluates survey data on Veterans. Background in the social sciences and/or demography preferred.
- GS-1530-12/13: Prepares reports analyzing demographic trends of the Veteran Population. Background in demography and writing skills essential.
- GS-1530-12/13: Analyzes and collects health data on Veterans. Ability to program statistical packages and present analytical results orally or in writing essential.

Applicants should contact Dr. Amar J. Singh, Statistical Policy & Research Service, Veteran's Administration, 810 Vermont Avenue, N.W., Washington, D.C. 20420

The Research Division, Internal Revenue Service, is seeking persons at the GS-7 through GS-12 levels with background in mathematics, statistics, social science, and operations research to be part of teams working on challenging problems in discerning taxpayer behavior and developing the best statistical estimators for measuring aspects of this behavior. For additional information contact: Claude O. Archer at 202/376-0225.



AMERICAN STATISTICAL ASSOCIATION
806 Fifteenth Street, N. W. Washington, D. C. 20005

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