

# Washington Statistical Society

CHAPTER • AMERICAN STATISTICAL ASSOCIATION

WSS Newsletter-June 1983

## CALENDAR

### WSS-Sponsored

TOPIC: Theoretical and Empirical Concerns for Measuring Benefits of Improved Water Quality  
SPEAKER: Ann Fisher, Environmental Protection Agency  
CHAIR: Fred Vogel, U.S. Department of Agriculture  
DATE AND TIME: Thursday, June 2, 1983, 12:30-2:00 PM  
LOCATION: Room 2096, South Building, USDA, 12th & Independence, S.W.

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TOPIC: Federal Statistical Policy and Coordination---Who Needs It?  
SPEAKER: James T. Bonnen, Michigan State University  
CHAIR: Joseph Gastwirth, George Washington University  
DATE AND TIME: Tuesday, June 7, 1983, 12:30-2:00 PM  
LOCATION: IRS Auditorium, 7th Floor, 1111 Constitution Avenue, N.W.

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TOPIC: Workshop on Presenting Statistical Papers  
SPEAKERS: Charles Alexander, Census; Wendy Alvey, IRS; Chuck Cowan, Census; Katherine Wallman, COPAFS; and Andrew White, NCHS  
DATE AND TIME: Wednesday, June 8, 1983, 12:30-2:30 PM  
LOCATION: IRS Auditorium, 7th Floor, 1111 Constitution Avenue, N.W.

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TOPIC: A Generalized Multicollinearity Index for Regression Analysis  
SPEAKER: P.A.V.B. Swamy, George Washington University  
CHAIR: Raymond J. Carroll, University of North Carolina  
DATE AND TIME: Friday, June 10, 1983, 12:30-2:00 PM  
LOCATION: Room 5A-092, Forrestal Building, 1000 Independence Avenue, S.W.

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TOPIC: Can Micro-Computers Be Used to Capture Data from the Consumer Price Index (CPI)?  
SPEAKER: J. Harvey Trimble, Jr., Bureau of Labor Statistics  
CHAIR: David Morganstein, WESTAT  
DISCUSSANT: Ronald J. Steele, U.S. Department of Agriculture  
DATE AND TIME: Thursday, June 16, 1983, 12:30-2:00 PM  
LOCATION: Department of Labor Auditorium, 3rd and Constitution Avenue, N.W. (Entrance: 3rd and C Streets, N.W.)

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TOPIC: On the Computation of Power Generating System Reliability Indexes  
SPEAKER: M. Mazumdar, University of Pittsburgh  
CHAIR: Seymour Selig, Office of Naval Research  
DATE AND TIME: Thursday, June 16, 1983, 12:30-2:00 PM  
LOCATION: Room 5A-104, Forrestal Building, 1000 Independence Avenue, S.W.

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### ANNUAL DINNER MEETING

SPEAKER: Nancy Teeters, Governor, Federal Reserve Board  
DATE AND TIME: Thursday, June 23, 1983  
Additional Information and Reservation Form Inside

DETAILED INFORMATION ON THE MEETINGS

TOPIC: Theoretical and Empirical Concerns for Measuring Benefits of Improved Water Quality

ABSTRACT: Prior estimates of the benefits of public goods such as parks, wildlife refuges and reservoirs often have concentrated on user benefits-particularly recreation use benefits. These estimates will understate total benefits if there are intrinsic or non-use benefits. This presentation considers the conceptual issues of relating intrinsic benefits to use benefits, and examines empirical evidence about their relationship.

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TOPIC: Federal Statistical Policy and Co-ordination

ABSTRACT: The functions of statistical policy are many and interactive. Some are poorly understood and poorly supported, even in government. OMB stewardship of statistical policy leaves much to be desired. Their record under the Paper Work Reduction Act of 1980 will be reviewed and modifications in legislation and its management suggested.

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TOPIC: Workshop on Presenting Statistical Papers

ABSTRACT: The purpose of the workshop is to aid participants in preparing and giving more effective presentations of their material. Topics include: (1) selection of material for presentation (Katherine Wallman); (2) preparation and use of visual aids (Andrew White); (3) handouts (Wendy Alvey); (4) oral delivery (Charles Alexander); and (5) poster sessions (Chuck Cowan).

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TOPIC: A Generalized Multicollinearity Index for Regression Analysis

ABSTRACT: This talk describes a formula for measuring multicollinearity. This measure takes the correct value of zero if the model is truly orthogonal and nonzero value otherwise. Empirical examples show that forcing minimax solutions for regression estimators increases multicollinearity. One technique is to minimize multicollinearity for near minimax solutions. The talk highlights the use of the measure rather than the method.

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TOPIC: Can Micro-computers Be Used to Capture Data From the CPI?

ABSTRACT: Over the last year BLS has been evaluating the suitability of using micro computers for capturing data for the CPI in 86 cities. The session will discuss: (1) The strategy developed for data capture and validation; (2) The strengths and weaknesses of micro computers; and (3) An evaluation of software and hardware.

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TOPIC: On the Computation of Power Generating Reliability Indexes

ABSTRACT: The evaluation of electrical utility power generating-system performance involves the computation of reliability indexes, such as loss-of-load probability, and an expected operating cost index. The evaluation of these performance measures requires the computation of the distribution function of the convolution of a large number of Bernoulli random variables having different distributions. Several approximate analytical procedures for computing these measures were investigated: (1) the method of cumulants; (2) a distribution fitting procedure; and (3) "a large deviation" procedure due to Esscher's approximation.

NATIONAL CENTER FOR HEALTH STATISTICS SEMINARS

TOPIC: ECONOMIC CHANGES AND NATIONAL MORTALITY RATE  
SPEAKER: Harvey Brenner, John Hopkins University  
DATE AND TIME: June 23 and June 24, 1983, 1:30-2:30 PM  
LOCATION: Center Building, Room 7-32, 3700 East-West Highway, Hyattsville, MD  
ABSTRACT: Time series regression models of changes in national mortality rates for all causes, such as heart disease, suicide, and infant mortality will be discussed. Independent variables in the model include unemployment and business failure rates, and consumption of cigarettes and alcohol.

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TOPIC: PROBABILITY AND PREDICTION THEORY MEASURES OF MISSING DATA ERROR  
SPEAKER: Wesley Schaible, Bureau of Labor Statistics  
DATE AND TIME: June 30, 1983, 1:30-2:30 PM  
LOCATION: Center Building, Room 7-32, 3700 East-West Highway, Hyattsville, MD  
ABSTRACT: When an estimate of finite population total is made from sample information, an error due to missing data can occur if the required data item is not obtained for all sample units. Probability and prediction theories require different assumptions and provide different measures of missing data bias and variance. To illustrate the two approaches, empirical comparisons of actual and estimated errors will be presented for the simple expansion estimator when probability of response assumptions are and are not met.

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WASHINGTON SAS--USERS GROUP MEETING

SPEAKERS: Don Henderson, ORI, and James Walker, Morino Associates  
DATE AND TIME: Tuesday, June 14, 1983, 1:00-4:00 PM  
LOCATION: Library of Congress, James Madison Building, E. Quincy Mumford Room (6th Floor)  
ABSTRACT: Don Henderson will speak on the "SAS Supervisor." The major functions of the program - compiling code and controlling execution - will be addressed. James Walker will talk on design considerations for large systems in high data volumes. For additional information contact Marilyn Sorenson at 226-6272.

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EMPLOYMENT COLUMN

Deadline for inserting notices is the 1st 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

Analyst in American Government  
GS-9 and GS-15

Congressional Research Service has two positions open. Applicants must have specialized knowledge in American National government and familiarity with Federal Statistical Policy. For additional information contact Ted Moore at 287-5620. Refer to Vacancy Announcements 30272 (GS-9) or Vacancy Announcement 30298 (GS-15).

Statisticians  
GS-7/12

Office of Toxic Substances, EPA, seeking statisticians for permanent full-time positions. Training and/or experience with statistical software packages, SAS required. Knowledge of sampling theory and biostatistics desirable. Salary range \$16,559 - \$38,185. Send SF 171 to Joe Carra, 2262 Wheystone Street, Vienna, VA 22180. (Phone 382-3886).

Mathematical Statistician The United States Postal Service, is recruiting for the position of Mathematical Statistician. Incumbent develops statistical systems for a broad area of postal operations including the design of sampling plans, estimation procedures, and measures of precision. Starting salary: 27,872 and up, depending on qualifications and experience. Forward resume with salary history to: General Manager, Headquarters Personnel Division, 475 L'Enfant Plaza West, S.W., Room 1813, Washington, D.C. 20260.

(mailed 5/17/83)



**AMERICAN STATISTICAL ASSOCIATION**

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