



DECEMBER 1984

WASHINGTON
STATISTICAL
SOCIETY

NEWSLETTER

CALENDAR

- 1. December 4 Tuesday Evaluation of Total Exposure to Air Polutants and Relative Comparisons of Residential, Occupational and Outdoor Exposure
- 2. December 5 Wednesday The 1982 Census of Agriculture
- 3. December 6 Thursday An Overlapping Information Survey Model for Evaluating Information
- 4. December 12 Wednesday WSS Holiday Wine and Cheese Party
- 5. December 13 Thursday A Flexible and Interactive Edit and Imputation System for Ratio Edits
- 6. December 13 Thursday Issues in Instrument Calibration
- 7. January 8 Tuesday Updating Seasonal Adjustment Factors While Preserving Historical Patterns: Plant and Equipment Investment Expenditures in the United States

A BRIEF HISTORY of the WASHINGTON STATISTICAL SOCIETY: By Al Mindlin and Rich Allen

The WSS was organized in 1926 with a short constitution that proclaimed it was to be a chapter of the American Statistical Association. Officers established were President, Vice-President, Secretary, and two Representatives-at-Large. However, a charter for ASA membership was not applied for until November 1935.

The names of most early Society officers are lost in the mists of history. William M. Stewart, Director of the Census Bureau, was President in 1928 and in 1930. The 1930 Secretary-Treasurer was E.A. Goldenweiser.

Although the 1926 Constitution set the annual dues at \$1, during the Great Depression no serious effort was made to collect dues. Instead, the Secretary, who by 1935 was the ASA District Representative, stood at the meeting house door and collected 15 cents from each attendee (25 cents at luncheon meetings). Dinner meetings cost \$1.25.

Apparently, in the earliest years, WSS program meetings were held about once a month. Information on topics and speakers for meetings before 1940 is scarce but there is a reference that in a 1939 meeting titled "Irrelevant Remarks on Trivial Matters in Modern Statistical Theory," addressed by Leon Henderson, Arne Fisher and Bassett Jones, the discussion got so ribald that "the doors were closed".

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WASHINGTON STATISTICAL SOCIETY PROGRAM CHAIRS

Agri. & Nat. Res.
Fred Vogel 447-3638
Gary Liberson 363-7140

Phys. Sci. & Eng.
Seymour Selig 334-3522
Nozer Singpurwalla 676-7515

Short Courses
Wendy Alvey 376-0216

Economics
Wray Smith 484-9220
Bette Mahoney 695-9053

Pub. Health & Biostat
James Dambrosia 496-5763
Jai Choi 436-7047

Methodology
Cathryn Dippo 523-1874

Social & Dem.
Lee-Ann Hayek 357-1587
Charles Mann 466-6161

Stat. Computing
Harry Foxwell 872-8058
Ron Steele 475-3483

Newsletter
Julia Oliver 252-1121

Employment
Evelyn Kay 223-2530

A BRIEF HISTORY of the WASHINGTON STATISTICAL SOCIETY (Continued)

The informal financial management of the Society's early days was simply inadequate, and in 1941 WSS was insolvent (a \$10 deficit). The regular meeting door fee of 15 cents could not be raised because most of the meetings were held at George Washington University, where a charge greater than 15 cents would make the University liable for taxes as conducting meetings for pay. WSS discontinued door collections and ordered collection of \$1 from each member at the beginning of the season. Heretofore, chapter membership had been defined as every ASA member living in the Washington area. With the increasing number of statisticians migrating to Washington because of the People's War of Survival, WSS trumpeted to the world that the membership in 1942 was a thousand persons--approximately one third of the total membership of ASA. However, when the Board of Directors sought to collect its dues only about 200 persons responded to the call.

WSS membership grew steadily after World War II. The 1953 report of the Secretary-Treasurer stated that more than 700 of the nearly 900 ASA members in the Washington area were WSS members. Membership increased particularly rapidly in the period 1958 to 1964 and continued inching up to a temporary peak of 1,500 in 1967. Membership declined in the period 1969-1974 to about 1,350. However, the trend reversed in 1975 and a probable membership peak of 1,773 was reached in 1979.

The first Annual Dinner meeting was held in 1947, with Isadore Lubin as speaker, and with the exception of five years, the event has been held each year thereafter.

Through the 1950's and early 1960's attention of the Society's Board of Directors focused heavily on scheduling meetings. It was mainly a program committee, leaving little time to develop additional activities. For the most part an evening meeting was held each month through a seven or eight month season. In 1963 a special committee was established to develop over the summer the entire year's set of seven meetings. Under the leadership of T.D. Woolsey the first program committees were established in 1964--Economics under Hyman Kaitz, Public Health and Biostatistics under Oswald Sagen and Monroe Sirken, and Social and Demographic under David Kaplan. The program committee system flourished from the beginning, rapidly taking over the main burden of meetings and freeing the Board of Directors for further improvements.

As it became apparent that daytime meetings were more popular than evening meetings, more and more meetings were held during the day. In the 1969-70 season there were no evening meetings at all, except the Annual Dinner.

The 1960's saw other dramatic expansions of Society activities. In 1962 an award of one-year membership in ASA and WSS to an outstanding graduate student in each of seven universities in the Washington-Baltimore area was initiated. Also in 1962 a Methodology Committee was established under Jerome Cornfield and Seymore Geisser. Under the subsequent leadership of Samuel Greenhouse, and with an enabling revision of the Constitution, this evolved by 1963 into a semi-autonomous Section of the Society with its own elected officials and separate programming. In 1966 a Baltimore Committee was established under Harold Grossman. WSS financed the growth of a statistical program in the Baltimore area, until 1969 it felt sturdy enough to cut the parental tie and strike out as a "Maryland" chapter of ASA. In 1967 an Employment Service was established under Marie Eldridge. Also in 1967 an Outstanding Paper Award Committee for young statisticians was established under Churchill Eisenhart. In 1968 a WSS Committee on ASA fellows was established under Margaret Martin.

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A BRIEF HISTORY of the WASHINGTON STATISTICAL SOCIETY (Continued)

The increase in Society activities during the 60's and rapidly rising costs spelled the end of the \$1.00 dues in 1967 even though a number of economy measures such as switching to bulk rate newsletter mailings were taken. Dues were raised to \$2.00 a year in 1967 and remained at that level for 10 years. Increases in mailing costs necessitated raises to \$3.00 in 1977 and \$4.00 in 1979 which was maintained until 1984 when the dues were raised to \$6.00.

A major membership survey was conducted in 1969 which pointed out a generation gap. The majority of members of WSS were age 40 or above and favored nontechnical meetings. Nontechnical meetings tended to have higher attendance, but technical meetings drew more of the younger members. The WSS program attempted to provide a balance of the two types of sessions.

The 1970's saw WSS attempt a number of new programs. Some of them were envisioned as annual programs but did not prove to have such permanence. In 1973 a W.J. Youden memorial scholarship was established in conjunction with the American Society for Quality Control. The program was to provide scholarship assistance for a worthy student at the Washington Technical Institute. Apparently the scholarship was awarded only in 1973 and in 1976.

In 1974 WSS participated with a dozen other private and government sponsors in a three-day symposium on Statistics and the Environment. This symposium followed other similar presentations in California and was very successful, with over 200 participants. There was considerable interest in establishing such a symposium as an annual event but it was not to be.

In 1976, to commemorate the 50th anniversary of the Society, five past presidents of the American Statistical Association addressed the WSS annual dinner on the topic of "The Past as Prologue to the Future". This proved to be one of the most interesting annual dinner meetings of all time. Another notable accomplishment of the 1975-76 Society activities was the establishment of a "local associate membership" program. That feature allows a non-ASA member such as a retired statistician or an individual working in some other field to receive the WSS newsletter and keep abreast of statistical activities in the Washington, D.C. area.

The 1977-78 program year was marked by two very popular activities. A short course on variance estimation was planned which ran on six consecutive Fridays. Over 140 people applied for the 50 available spots and a random process was used to select the lucky 50 participants. A reception was held for visiting statisticians from Latin America. Since the room would hold only 135 people over 60 individuals had to be turned away.

A major new award program was started during the 1978-79 program year, the Julius Shiskin Memorial Award for Economic Statistics. WSS is joined in this program by the Bureau of Labor Statistics, the Bureau of the Census, the National Association of Business Economists, the Bureau of Economic Analysis, the National Bureau of Economic Research, and the Office of Management and Budget, all of which Julius Shiskin was associated with during his career. This award has been presented annually with the selection made by a committee of representatives from each participating organization.

The fund raising activities for the Shiskin Award led WSS to separate the two positions of secretary and treasurer, an arrangement which had been provided for in the WSS Constitutions. Other changes over time in the structure of the elected positions of the Society was the establishment of the Vice-President as the President-Elect in 1966 and the establishment of two-year terms for Representatives-at-Large, Secretary, and Treasurer in 1984. The emphasis on maintaining continuity of WSS activities has been reflected in the encouragement of two-person teams for organizing various program sessions.

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A BRIEF HISTORY of the WASHINGTON STATISTICAL SOCIETY (Continued)

The thawing of relations with China led to one of the most successful activities of the Society. Five statisticians from the National Statistical Society of China visited Washington, D.C. for nearly a full week in conjunction with their visit to the 1981 ASA annual meetings. WSS served as the host for the D.C. part of the trip. Activities arranged included visits with statistical organizations, a reception at the National Academy of Sciences, an evening of "pot luck" dinner, chaperoned sightseeing, and a most successful evening dinner in honor of the visitors.

The success of China delegation visit led to the sponsoring of other special presentations by the Society. In the Spring of 1982, an all day program was scheduled to commemorate the 200th anniversary of the birth of S.D. Poisson. That fall, W.E. Deming's birthday was celebrated in an evening social session. Morris Hansen's 73rd birthday was recognized in 1983 with a similar evening social.

PROGRAM ABSTRACTS

TOPIC: Evaluation of Total Exposure to Air Pollutants and Relative Comparisons of Residential, Occupational and Outdoor Exposure
SPEAKER: David Magge, Environmental Protection Agency
DATE AND TIME: Tuesday, December 4, 1984; 12:30PM-2:00PM
LOCATION: BE-069, Forrestal Building, 1000 Independence Avenue, S.W.
ABSTRACT: This talk focuses on the evaluation of total exposure to air pollutants and the relationship between the relative contributions of pollutants from residential, occupational and outdoor exposure.

TOPIC: The 1982 Census of Agriculture
SPEAKERS: Cynthia Clark, Dean Prochaska, and Nicholas Alberti, Census Bureau
CHAIR: Charles P. Pautler, Census Bureau
DATE AND TIME: Wednesday, December 5, 1984; 12:30PM-2:00PM
LOCATION: Room 3109, South Agriculture Building, Independence Avenue, S.W.
ABSTRACT: This program will present results from two recent evaluations of data from the 1982 Census of Agriculture. The first paper discusses an evaluation of the coverage of the mail list used for the Census. The coverage evaluation provided estimates of numbers and characteristics of farms not on the mail list, and numbers of farms classified as non-farms, and non-farms classified as farms (including multiply-counted operations). The second paper discusses procedural and conceptual differences in the past three Censuses of Agriculture that affect comparisons of data between Censuses and evaluates proposed adjustments to the data to reflect those differences.

TOPIC: WSS Holiday Wine and Cheese Party
DATE AND TIME: Wednesday, December 12, 1984; 5:30PM-8:00PM
LOCATION: Faculty Club, Marvin Center, George Washington University
COST: \$8.50 per member or guest - Pre-registration required.
See enclosed Registration Sheet

PROGRAM ABSTRACTS

TOPIC: An Overlapping Information Survey Model for Evaluating Information
SPEAKER: Stanley L. Warner, York University-Canada
CHAIR: Thomas Jabine, Committee on National Statistics
DISCUSSANT: Wray Smith, George Washington University and Mathematica
DATE AND TIME: Thursday, December 6, 1984; 12:30PM-2:00PM
LOCATION: Martin Luther King Memorial Library, Room 315, 901 G Street, N.W.
ABSTRACT: An area of interest in survey research is the use of survey methodology to measure the influence of arguments and data. Pollsters, social researchers, and decision makers are frequently concerned with evaluating the influences of prepared information or summarized research. The surveyed population may be of interest in itself, or it may be of interest primarily as a test population to help develop information for presentation to others. A simple theoretical estimation model is developed under the assumption that total information is finite and that data and arguments previously seen are perfectly discounted. An empirical application is described.

TOPIC: Issues in Instrument Calibration
SPEAKER: Clifford Spiegelman, National Bureau of Standards
CHAIR: Nozer D. Singpurwalla, George Washington University
DISCUSSANT: Dennis V. Lindley, Visiting Professor, George Washington University
DATE AND TIME: Thursday, December 13, 1984: 12:30PM-2:00PM
LOCATION: George Washington University, Marvin Center, Room 404, 800-21st Street, NW
ABSTRACT: Instrument calibration is used to relate instrument readings to national measurement standards. An important part of calibration is the calibration equipment, where the calibration curve and its uncertainty are estimated. It is crucial that both the experiment and the type of calibration curve be chosen to make the instrument readings as meaningful and accurate as possible. There are a number of obstacles, such as unknown physical laws underlying the instrument's operation, including the instrument's stability and measurement error in the calibration standards. This talk will give an overview of important issues and problems for precision instrument calibration.

TOPIC: A Flexible and Interactive Edit and Imputation System for Ratio Edits
SPEAKER: Brian Greenberg, Bureau of the Census
CHAIR: Harvey Trimble, Bureau of Labor Statistics
DISCUSSANTS: Fritz Scheuren, IRS and Terry Ireland, DOD
DATE AND TIME: Thursday, December 13, 1984; 12:30PM-2:00PM
LOCATION: George Washington University, Marvin Center, Room 402, 800-21st St., N.W.
ABSTRACT: In general, the role of subject-matter specialists is crucial in the design and evaluation of an edit and imputation program. An edit and imputation system must blend statistical and subject-matter expertise in a coherent framework and integrate the edit constraints with an imputation strategy. A general system to edit data under ratio edits has been developed at the Bureau of the Census and a prototype model has been developed for the Annual Survey of Manufacturers. A modification of this prototype system was used to process two segments of the 1982 Economic Census. An interactive version of this system has been developed for use by subject matter analysts for on-line processing of referral cases. Special purpose structural and subject-expert based imputation criteria can be easily incorporated into this system, and knowledge gained working with potential users contributed to the design of features in this program.

NOTES FROM THE OCTOBER BOARD MEETING

The Board of Directors of WSS took final action on several items during the October 30 Board meeting. A \$200 donation to the American Statistical Association for the development portion of the ASA Building and Development Fund was approved. The following wording of an Employment Column policy was approved: "Jobs wanted and job vacancy ads of interest to the membership of WSS should be published in the Society's Newsletter." WSS will accept notices of "for cost" items in future Newsletters, but will list only by source and cost. Considerable discussion was held on a policy to limit the likelihood of program sessions becoming commercial presentations, but no final decision was reached.

One new proposal which was discussed was the possibility of WSS hosting a Statistical Software Exposition. Preliminary results of the Membership Survey on Short Courses were presented. Survey results indicated strong interest in short courses in Exploratory Data Analysis, Expert Systems, and New Developments in Sampling Applications.

WSS EXPO OF STATISTICAL SOFTWARE FOR MICROS

Planning begins -- help needed. The WSS Board has given its approval to begin planning an exposition of statistical software for microcomputers to be held next spring. The Expo will include product demonstrations, lectures, an exhibition of test data set results, and a social event. Help is needed to plan and carry out the numerous details necessary for a successful Expo. If you have organizational or technical skills you would like to contribute, write to: Jim Carpenter, WSS Expo, 5036 Corun Road, Jefferson, Maryland 21755. You can suggest exhibitors. If you know of, or have written software for micros that would be of special interest to WSS members, send information to Jim Carpenter (include your address and daytime phone number).

PROGRAMS BY OTHER SPONSORS

Internal Revenue Service - Statistics of Income Division Seminar

TOPIC: Highlights of the 1981 SOI-Corporation Income Tax Returns Publication
SPEAKER: David Barker, Joe Voith, Max Johns, and Homer Jones
CHAIR: Karen L. Cys
DATE AND TIME: Friday, December 7, 1984; 1:00PM-2:00PM
LOCATION: 1201 E Street, N.W., Room 401, Washington, D.C.
ABSTRACT: This seminar highlights information contained in the annual report of the SOI-Corporation Income Tax Returns Publication for Tax Year 1981. Presented will be data on taxpayers' assets, receipts, net income and tax. There will also be a discussion on changes in tax law which affect the data, as well as new editing techniques and the sampling methods used for 1981.

Bureau of Labor Statistics Seminar

TOPIC: Models and Methods for Seasonal Time Series Analysis
SPEAKER: Arthur P. Dempster, Harvard University
DATE AND TIME: Friday, November 30, 1984; 10:30AM-11:30AM
LOCATION: GAO Building, Room 2740, 441 G Street, N.W.
Please contact Sandra West at 523-1874 if you plan to attend.
ABSTRACT: Seasonal analysis can be carried out by fitting component models and reporting posterior means of nonseasonal components. Program BTS facilitates such fitting for models with slowly varying random seasonal components, while the random nonseasonal components emphasize low frequency or "long memory" variation. The degree of sensitivity of seasonal adjustment to model assumptions will be illustrated on several BLS employment series.

EMPLOYMENT COLUMN

Deadline for inserting notices is five weeks before desired month of publication.

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

JOB OPENINGS

Senior Mathematical Statistician The Statistical Analysis Division of the Postal Service is recruiting for Senior Mathematical Statisticians. Incumbents will participate in the development of statistical systems for a broad area of postal operations. Activities include the design of sampling plans, estimation procedures, and measures of precision. Professionals with training in mathematical statistics, experience in sampling, experimental design, and methods of statistical estimation are invited to apply. Starting salary will be from \$31,677 up, depending on qualifications and experience. To apply, forward resume with salary history to General Manager, Headquarters Personnel Division, Room 1510, 475 L'Enfant Plaza West, S.W., Washington, DC, 20260-4261.

Mathematical Statistician IRS has an opening for (mathematical statistician) with Ph.D or Master's degree. Knowledge of sample design, multivariate analysis, and use of SPSS and BMDP desirable. Also helpful, would be knowledge of FORTRAN and Univac computers. Projects will relate to research sample designs and development of workload selection systems. For additional information, write or submit SF-171 to Internal Revenue Service, Research Division PM:PFR:R; Room 3423, 1111 Constitution Avenue, N.W., Washington, D.C. 20224, Attention Don Wilt, Chief, Statistical Methods Group, Telephone 202/376-0203.

Mathematical Statistician The Bureau of Labor Statistics has a position available for work on the Employment Cost Index. Required is theoretical knowledge & experience in sample design, multivariate statistics, regression analysis, and variance computation. Send resume or SF-171 to Ronny Schaul Bureau of Labor Statistics, Room 2838, 441 G Street, N.W., Washington, D.C., 20212.

Assistant Professor The University of Maryland is recruiting for the tenure track position of Assistant Professor in the School of Public Affairs with major teaching duties in the area of quantitative methods. The school offers Masters Degrees in Public Management with concentrations in public sector financial management, national security studies, and government regulation of industry. Quantitative methods are strongly emphasized throughout the program. Candidates should either already possess, or expect to receive prior to the beginning date of the appointment, a Ph.D. degree or its equivalent in operations research, economics, public policy, or applied mathematics. Candidates must have a strong interest and, if possible, experience in analyzing public sector problems in areas represented by the School's concentrations. The ability to teach in one or more of the School's concentrations is essential. Send applications by December 15, 1984 to Professor H. Peyton Young, School of Public Affairs, University of Maryland, College Park, Maryland 20742.

**Operations Research/
Mathematical Statistics** Central Intelligence Agency seeks individuals in Operations Research or Mathematical Statistics for D.C. based position within small internal consulting group. Responsibilities center on the development of statistical and operations research techniques and their application to a variety of intelligence problems. You should have up to three years related experience. A working knowledge of FORTRAN or equivalent computer language highly desirable. Salary ranges from \$32,000 to \$38,000 depending on qualifications. Send resume, graduate transcript and writing samples to Central Intelligence Agency, DDI/Analytic Support Group (A34), Room 2G40, Washington, D.C. 20505. U.S. Citizenship required. Equal opportunity employer.

JOB OPENINGS (Continued)

Faculty Positions

The Department of Statistics/Computer & Information Systems at the George Washington University has openings for an Assistant Professor and an Associate/Full Professor, both tenure accruing, in the computer and information systems area. Both positions require a Ph.D. in Computer Science or a closely related area. Appointment to the senior position requires an established record of publications, teaching, and research in computer science. A knowledge of the interface of computer science and statistics is desirable. In addition to the above, an established record of, or a potential for, leadership in building up the undergraduate and master's programs in computer information systems is desired. Appointment to the junior position should show potential for research in computer science with an interest and some expertise in the interface between computer science and statistics, as well as potential for teaching. Interested candidates should apply to The Chairman, Search Committee, c/o Professor A.D. Kirsch, Department of Statistics/Computer & Information Systems, George Washington University, Washington, D.C. 20052.



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