## ashington Statistical Society

## AMERICAN STATISTICAL ASSOCIATION CHAPTER

WSS Newsletter-February 1982

WSS Sponsored:

**CALENDAR** 

Topic:

Methods of Estimation for the 1980 Census Undercount

Speakers:

Charles D. Cowan, Chief, Survey Design Branch, Statistical Methods Division, Census

Bureau, Jeffrey S. Passel, Supervisory Staff Demographer, Population Division,

Census Bureau

Location:

Forrestal Building, 1000 Independence Ave., SW, Washington, D.C., Room GJ015

Date and Time: Chair & Discussant: Wednesday, February 10, 1982, 12:30-2:00 p.m. Lee Abramson, NRC and Maria Gonzalez, OMB

Topic:

Dose Response Models for Chemical Carcinogens and Interaction between Statistics

and Toxicology

Speakers:

Bruce Thompson, University of Maryland, Charles Brown, National Cancer Institute

Location:

Federal Building, 12th & Penn. Ave., NW, Room 3000A, Washington, D.C.

Date and Time:

Wednesday, February 10, 1982, 12:30-2:00 p.m.

Topic:

An Innovative Sampling Design: National Marine Recreational Fishing Survey

Speaker:

Dhirendra N. Ghosh—Consultant

Location:

Federal Building, 12th & Penn. Ave., NW, Room 3000A, Washington, D.C.

Date and Time:

Thursday, February 11, 1982, 1:00-3:00 p.m. \*\*\*\*\*\*\*\*\*\*

Topic:

Alternative Frame Construction for a Price Survey

Speakers:

Carol C. House, Nancy J. Carter, Douglas C. Bond (all of USDA)

Location:

Federal Building, 12th & Penn. Ave., NW, Room 3000B, Washington, D.C.

Date and Time:

Tuesday, February 23, 1982, 12:30-2:00 p.m. \*\*\*\*\*\*\*\*\*\*

Topic:

Report on Human Rights Activities at the ISI Meeting in Buenos Aires

Speakers:

Fred Leone, Executive Director, Amer. Stat. Assoc., Eric Stover, Clearinghouse on

Science and Human Rights, Amer. Assoc. for Advancement of Science

Location:

IRS Auditorium, Room 7132, 1111 Constitution Ave., NW, Washington, D.C.

Date and Time:

Wednesday, February 24, 1982, 12:30-2:00 p.m.

Topic:

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Estimating and Testing Changing Economic Relationships: The Case of Demand for Money

Speaker:

P.A.V.B. Swamy, Federal Reserve Board

Location:

Conference Room North, (Room 3437 N. B&C), Dept. of Labor, 3rd & Const., NW,

Washington, D.C.

Date and Time:

Thursday, February 25, 1982, 12:30-2:00 p.m.

Topic:

Coefficients of Monotonicity and Some Applications for Data Analysis

Speaker:

Adi Reveh, ASA/NSF Junior Research Fellow US Census Bureau, Hebrew Univ.

Jesusaleum and Stanford Univ.

Location:

Forrestal Building, 1000 Independence Ave., S.W., Washington, D.C., Room GJ-015

Tuesday, March 2, 1982, 12:30-2:00 p.m.

Date and Time: Other Sponsor:

Sponsor:

Speakers:

Internal Revenue Service, Stat. Div.

Topic:

Annual Reports, Statistics of Income-1978, Sole Proprietorship Returns and

Statistics of Income-1978, Partnership Returns

Ray Wolfe and Patrick Piet

(For further information call-

376-0151 or 376-0153.)

Location:

1201 E St., NW, Room 806B, Washington, D.C.

Date and Time: Thursday, February 11, 1982, 1:00 p.m.

## TAILED INFORMATION ON THE MEETINGS (See January Newsletter for the first one)

Topic:

Dose Response Models for Chemical Carcinogens and Interaction Between Statistics and Toxicology

Discussant:

Charles Brown, National Cancer Institute

Abstract:

Dose response models were developed for chemical carcinogens using the concepts of time to tumor and

cellular repair mechanisms.

Topic: Chair:

An Innovative Sampling Design: National Marine Recreational Fishing Survey

Discussant:

Barbara Bailar, U.S. Census Buureau

Arthur Kirsch, Prof. Dept. of Statistics and Dept. of Psychology, G.W. Univ.

Abstract:

The sampling design for the nationwide Marine Recreational Fishing Survey is a complex design utilizing two independent surveys. First a telephone survey of coastal households to estimate the total number of trips for a two-month recall period. Second, an on-site survey of fishermen to estimate the average catch per trip. The estimates from these two independent surveys are then combined to estimate the total catch for both coastal and noncoastal fishermen. Such a survey is termed a complemented survey. Formulas for the optimum allocation of resources to the component surveys are derived along with the formulas for the sampling variances. Special problems encountered such as intercepting incomplete trips and estimation of total participation are also discussed.

Topic: Chair:

Alternative Frame Construction for a Price Survey Richard Allen, U.S. Department of Agriculture (USDA)

Discussant:

Curt Jacobs, U.S. Department of Labor

Abstract:

Inadequacies in the existing sampling frame for an agricultural price survey led to an experiment in building lists of business establishments. Farm operators in a national expenditure survey were asked for the addresses of places where they purchased various commodities and for their expenditure at each place. This new frame allowed the sampling of establishments with probabilities proportional to sales to farmers. The analysis includes the measurement of the incompleteness of the old frame (which was constructed primarily from yellow page advertisements), a comparison of price estimates from both frames, and a discussion of handling nonresponse in PPS sampling. The frame construction technique has application to many situations where construction of a complete sampling frame is prohibitive.

Topic: Chair:

Report on Human Rights Activities at the ISI Meeting in Buenos Aires

Thomas Jabine, Consultant

Abstract:

Because Carlos Noriega, a prominent statistician, was one of the thousands of persons who have disappeared in Argentina, the ASA's Ad Hoc Committee on Scientific Freedom and Human Rights was directed by the ASA Board of Directors to ". . . develop a program for ASA members, who so desire, to express their human rights concerns in an organized fashion at the time of the ISI meetings in Argentina". The speakers, who were major contributors to this effort, will explain what the Committee did in response to this directive and what took place in Buenos Aires during the ISI meeting.

Topic:

Estimating and Testing Changing Economic Relationships: The Case of Demand for Money

Chair:

P.A. Tinsley, Federal Reserve Board

Discussants:

William Cleveland, Federal Reserve Board, James R. Barth, Dept. of Economics, G.W. University.

Abstract:

The poor track records of conventional fixed coefficients models in applied economic forecasting suggest that it may be useful to explore alternatives to these models. The objective of this paper is to illustrate the use of a graphic coefficient estimator to identify and interpret the principal sources of uncertainity. 

Topic:

Coefficients of Monotonicity and Some Applications for Data Analysis

Chair: Discussant: David F. Findley, Principal Researcher, Census Bureau

Abstract:

Karen Kafadar, National Bureau of Standards Two families of coefficients of Monotonicity and Polytonicity will be defined for quantitative as well as qualitative variables. Several known coefficients such as Kendall's ranked correlation coefficient, Yule's coefficient of association and Spearman's ranked measure of association are special cases. The two families

are based on the Absolute Value Principle and the Rank Image Principle. Some applications are: Seasonal Adjustment and Forecasting Time Series, Multidimensional Scaling, Discriminant Analyses, ANOVA, and

Multidimensional Scalogram Analysis.

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