

ANNUAL REPORT 1975-76
COMMUNITY AND ORGANIZATION RESEARCH INSTITUTE

Harold L. Votey, Jr.
Director

University of California at Santa Barbara

June 1976

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COMMUNITY AND ORGANIZATION RESEARCH INSTITUTE

Harold L. Votey, Jr., Director
Professor, Department of Economics

Perry Shapiro, Associate Director
Associate Professor, Department of Economics (On Leave)

W. Douglas Morgan, Acting Associate Director
Associate Professor, Department of Economics

Advisory Committee

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Department of Anthropology

Robert Sherman, Assistant Professor
Department of Psychology

David Simonett, Professor
Department of Geography

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Alan Wyner, Assistant Professor
Department of Political Science

Clifford Petrie, Community Representative
Executive Secretary, Area Planning Council

Gil Hendrich, Graduate Student Representative
Department of Economics

DIRECTOR'S STATEMENT

During the 1975-76 fiscal year, growth continued to be the goal. The Institute has had the greatest administrative load in its history in terms of grant activities underway, while continuing to process an increased number of proposals. The Institute has gained in breadth in the sense that a larger proportion on new proposals involve members of academic departments other than economics. The strong public policy emphasis remains a dominant feature of the Institute's research activities.

I. Research Underway

In terms of research in progress the Institute has tended to become broader with respect to the range of topics involved and in terms of disciplines represented. The project Minimizing the Social Cost of Drunken Driving, involving three political scientists from this campus, two economists, and a sociologist from UC San Diego is in its second year. New projects involve the Institute in energy related research for both a political scientist and an economist. Work continues on projects dealing with crime, population studies, health care, and the economics of divorce.

II. The Urban Extension Training Program

The urban economics program was given a sustained boost with the renewal grant that extends support for three more years in order to implement a number of innovations to that program. An increased participation from the department of political science has provided the basis for extended training relating to the relationship between economic analysis and the political implementation of workable policy. Creative new technologies are being utilized to permit the offering of course material at extended locations where faculty resources may be limited. A publication series is being funded that serves to acquaint policy makers, planners, and administrators with new techniques for decisionmaking and/or the application of existing techniques to new problems. The publications in the series present the results of faculty research and internship projects of the program, but may, in the future, include appropriate papers from UCSB researchers not formally associated with the urban program.

III. Proposals Submitted

Proposals submitted during the 1975-76 fiscal year fell into three main categories: (1) Faculty and Staff Research, (2) Training, and (3) University and Community Cooperative Assistance to Public Policy Decision-making.

In the first category are included proposals relating to criminal justice and health care, topics that have been continuously involving faculty participation. New areas of investigation include evaluation

of insurance options in the health care industry, dynamic interactions that influence the determination of the balance of payments, the identification of the money value of non-market (environmental and governmental) goods and services, quantifying the value of improvements in information for use in national policy models, and the factors involved in local governmental planning for seismic safety measures.

In the area of training, a new proposal for the creation of a new professional skill, that of public historian, has been submitted to several funding agencies. The public historian is envisioned to be a professional who can link the historic aspects of current problems to present realities so that policies can be evolved that represent ethical solutions consistent with longstanding community obligations and existing economic and political constraints. The public historian is expected to combine the skill of the historian at research and the discovery of relevant often obscure data with re-evaluation and analysis of current problems. This program is expected to be a natural complement to the ongoing urban economics program. Thus the University, through this Institute, will be able to provide the local community with a variety of skills and research capabilities applicable to a broad spectrum of local decisionmaking problems, while at the same time training students for eventual management and leadership in local government in a wide variety of roles.

The third category will represent cooperation between the University and volunteer local citizens groups organized for the occasion for the purpose of reviewing alternative solutions to specific problems to see that relevant information is transmitted to the public. This informational process is viewed as a feedback process, and it is the feedback that is important, if the project is to prove of value. Innovative methods utilizing the most up-to-date technologies will be employed to facilitate both the transmission of relevant information and the feedback of the public's response to that information, so that policymakers will be in a position to more effectively respond to the public will. The proposed test will deal with the highly controversial issues of the provision of water to the South Coast area and the effects of policies to control the spread of fires in the Los Padres National Forest through alternative, potentially massive, utilization of fuel breaks that could have a substantial aesthetic impact on the entire South Coast. Evaluation of the success of the program would be the job of political scientists, psychologists and sociologists in the UCSB faculty.

IV. Budget and Cash Flow

The core budget for the Institute has shown relatively little growth since its inception, a level of growth that is essentially zero if one takes into account the concurrent rate of inflation. In contrast, the expenditure of extra-mural funds has grown by 119% over the past two years (from the level of the 1973-74 fiscal year). Because of growth, the value of grants will, of course, exceed the current level of expenditure of extra-mural funds. The total value of grants in progress at the present time is \$664,143 of which \$141,807 represents a return of overhead funds to the Regents. These overhead funds earned by grants in progress alone thus represent a figure in excess of eight times this year's core budget. While

the grants in question will, in a number of cases, be conducted over more than a one year period, the fact remains that, in each recent year, overhead earned for the University has exceeded the core budget several fold. If one accepts the logic of the economic theory of investment that one should invest up to the point at which the marginal return just equals the marginal cost, one finds here a sound justification for substantial increases in the core budget that are designed to enhance the fund raising potential of the Institute.

V. Summary and Conclusion

More could be stated about the spread of participation across disciplines and the consistent strong growth in all aspects of the Institute's activities. This information is covered in detail in the appendices and it is probably more useful for the reader to scan these for himself to see where involvement takes place and from what quarters it comes. A more significant point that can be derived from this information is that the research activities of the Institute are growing at a substantially higher rate than the University itself. This potential for growth will continue to exist even as the University adapts to a no growth or limited growth mode. In fact, as the University's energies are directed toward quality improvement rather than quantitative growth, the potential for research should improve. Thus, it makes sense to continue to push for expansion in this Institute and in organized research in general to help to spearhead the search for greater quality within the University.

Community and Organization
Research Institute

SUMMARY OF HIGHLIGHTS

July 1975	Proposal submitted: "Measuring the Effectiveness of Perinatal Medical Care" to DHEW, Maternal and Child Health Section. Funding pending.	\$73,249
	Funding received under NIH Biomedical Sciences Support allocated to Ronald Williams for the project "A Proposal to Measure the Effectiveness of Perinatal Care in California Hospitals." These funds have been augmented with \$940 supplied by the Office of Research Development and tapes supplied by the California State Department of Health valued at more than \$2,000.	\$ 1,658
September 1975	Proposal submitted: "Minimizing the Social Cost of Drunken Driving: A Comparative Study of Options for Control," to National Institute of Mental Health.	\$108,322
October 1975	Meeting of the Tri-Counties Planning Directors Association, hosted by UCSB and the Institute.	
	Funding awarded: "The Internal Rate of Return on 1954-1962 OCS Oil and Gas Lease Sales and an Appraisal of the Effectiveness of the Bonus Bidding Procedure," USDI-GS.	\$30,251
November 1975	Proposal submitted: "ACCESS--Environmental Options Pilot Research Test," to DHEW Office of Education C.O.R.I.'s share \$80,071.	\$496,095
	Funding awarded: "Intrauterine Growth and Neonatal Risk in California," State of California Health and Welfare Agency.	\$4,986
	Funding awarded: "Minimizing the Social Cost of Drunken Driving," NIMH, Yr. 02.	\$82,887
December 1975	Proposal submitted: "Creating a New Professional Person: The Public Historian "	
	a. National Endowment for the Humanities	\$401,279
	b. The Rockefeller Institute	\$340,813
January 1976	Site visit from four members of the Maternal and Child Health research Grants Review Committee in connection with Ronald L. Williams proposal "Measuring the Effectiveness of Perinatal Medical Care," submitted July 1975.	
	Seminar hosted by the Institute and the Urban Economics Program: Speaker, Mr. Carl Kraemer, former Assistant Planner, County of Santa Barbara.	

February 1976	Proposal submitted: "Incentives When Risks Are Insured: Health and Liability Insurance," to The S.S. Huebner Foundation.	\$9,998
	Proposal submitted: "Study of Alternative Locations of Coal-Fired Electric Generating Plants to Supply Energy," subcontract with UCLA. Funded 2/76.	\$6,757
	Proposal submitted: "A Conference on the Alternatives for Control of Drunken Driving," to the Ford Foundation.	\$54,401
	Seminars hosted by the Institute and the Urban Economics Program: <ul style="list-style-type: none"> a. Mr. Norm Puff, Ventura County Planner b. Mr. Phil Hawthorne, Director, Ventura County Association of Governments c. Mr. William Cook, Santa Barbara County Assessor 	
March 1976	Proposal submitted: "Dynamics and Interdependence in the Balance of Trade: An Empirical Investigation," to National Science Foundation.	\$45,191
	Proposal submitted: "Identifying the Dollar Value of Non-Market (Environmental and Governmental) Goods and Services, " to National Science Foundation.	\$120,300
	Seminars hosted by the Institute and the Urban Economics Program: <ul style="list-style-type: none"> a. Mr. Howard Buchalter, Ventura County Economic Planner b. Mr. John Atha, Santa Barbara County Associate Area Planner 	
April 1976	Proposal submitted: "Quantifying the Value of Improvements in Information as a Basis for Setting Priorities in National Statistical Systems, and Exploration of the Informational Bases of Policy Models" to National Science Foundation.	\$72,986
	Funding awarded: The Institute is one of the recipients of an award for Biomedical Sciences Support. C.O.R.I.'s departmental percentage--	\$2,679
May 1976	Proposal submitted: "A Study of Health Insurance Regulation" to Social Security Administration.	\$66,029
	Proposal submitted: "The Responses of Local Governments in California to Seismic Safety Events," National Science Foundation (RANN).	\$174,214
	Funding awarded: "Divorce: An Economic Approach," NIH, Yr. 02.	\$19,843

June 1976

Site visit: Mr. Bruce Abel, editor of NSF publication Mosaic, to consult with Prof. Morgan regarding the publication of Urban Intern Research Reports in Public Policy.

Proposal submitted: "A Study of Health Insurance Regulation" to National Center for Health Services Research, PHS. \$50,702

Proposal submitted: "Urban Economics Program Option" to Office of Education, DHEW \$39,024

Funding Awarded: "Decision-making in the Colorado River Basin", National Science Foundation (RANN), Yr.03 \$19,695

EXTRAMURAL AWARD ACTIVITY

PROJECTS FUNDED

1. AN URBAN EXTENSION: SOME INNOVATIONS \$340,000
National Science Foundation 11/73-10/78
Project Director: Perry Shapiro

ABSTRACT

The Urban Economics Program at the University of California, Santa Barbara was started almost three years ago with the aid of a National Science Foundation grant. The program, to date, is a success; two cohorts of students are through the program and employed, and a third set is finishing their course work and preparing to take up internships with local public agencies.

This proposal is for additional funding to permit innovations in the program and expansion in important areas. First, we will add courses in the relationship between economic analysis and the political implementation of working policy. Our students need to be made aware that political realities are a part of the optimization process. Second, we will expand our activities in the area of the part time degree program. Creative uses of new educational technology will be used so that the program offering can be made available to students not able to attend full time. We will also extend our supervisory activities of students in the field and participate in part time consulting for local public agencies.

We are asking for three year funding beyond the original NSF grant. During this time, the program will be broadened and strengthened prior to the University's evaluation of it as an ongoing part of its program. It is very likely that the grant will be funded.

COMMENT

This project has been operating during the past year under the direction of W. Douglas Morgan while Perry Shapiro is on leave with the Bureau of Labor Statistics, Washington, D.C. Substantial progress has been made in developing new course material in political science, in developing modules for remote teaching, and in creating a series of published working papers generated by internship projects under Prof. Morgan's leadership.

2. CYCLES IN FERTILITY, MORTALITY AND ECONOMIC CONDITIONS

\$43,739

National Institute of Health

6/1/74-5/31/76

Faculty:

Llad Phillips, Department of Economics

Harold L. Votey, Jr., Department of Economics

Student:

Stephen Haynes, Research Assistant

ABSTRACT

The objective of this study is the understanding of the intertemporal relationships between fertility rates and mortality rates, migration, and variations in economic conditions. Primary attention will be devoted to utilizing long time series of annual data to analyze the variance, covariance, and lag structure of variables representing births, deaths, family formation, per capita income, saving, interest rates, and technology. Data from the United States, Sweden and the United Kingdom will be utilized in the study.

These relationships will be analyzed utilizing a dynamic simultaneous equation model which takes account of the feedback relationships between economic and demographic variables. The equations of the system include identities and response functions to which the techniques of spectral analysis will be applied to identify the lag structure and test the statistical significance of relationships between vital rates and economic time series. The hypothesis of periodicity of the various series will also be tested. Should there be significant evidence of periodicity, harmonic regression and other procedures for time series analysis will be utilized to further evaluate functional relationships.

COMMENT

The results of this research will be of major significance in determining policies for governing population growth and economic development. The identification and understanding of these feedback effects between demographic variables and economic variables is a necessary condition to the coordination of population policies and economic plans by demographers and economists.

3. MINIMIZING THE SOCIAL COST OF DRUNKEN DRIVING

\$75,000

Ford Foundation

8/1/74-9/15/76

Faculty:

Donald R. Cressey, Department of Sociology
Jack D. Douglas, Department of Sociology (UCSD)
Peter M. Merkl, Department of Political Science
Llad Phillips, Department of Economics
Harold L. Votey, Jr., Department of Economics

Specialist:

Daniel P. Gregory, Department of Political Science
Dieter Raabe, Department of Political Science

ABSTRACT

The plan of this proposed interdisciplinary research project is to examine a specific problem of social control: the minimization of the social losses from drunken driving. The goals of the research are (1) to examine and catalog the various methods for achieving social control of drunken driving in the United States and several western European countries, (2) to compare and contrast European methods and effectiveness with the American experience, and (3) to indicate the control options available to policy-makers given the degree to which they are constrained by culturally determined attitudes and political realities in the different countries. The study will consist of three phases. Phase I will be an evaluation of the political process as it affects social control. Phase II will involve the formulation of behavioral models appropriate for comparing performance between countries. Phase III will consist of an evaluation of the empirical studies to determine their implications for policy. The research team consists of members from the fields of criminology, economics, political science, and sociology. Theory and data from both societal (macro) level and individual (micro) level research will be utilized. Data will be collected in several nations at different socioeconomic and political power levels in order to develop a broad model capable of analyzing the variance among countries and among different sized jurisdictions in the efficacy of their social control techniques.

The empirical research will focus on the following main areas in which we are certain we will make substantive contributions to the questions of social control.

We will conduct seminars in London and Santa Barbara to synthesize our multidisciplinary viewpoints, and arrive at a broader overview of criminal justice in theory and in fact. Our empirical research will focus on the following questions:

1. Do measures to control alcohol at the point of sale or use effectively reduce the social costs of drunken driving?
2. Does the availability of alternative forms of transportation to the use of privately operated motor vehicles have an impact on the incidence of drunken driving?
3. What is the deterrent effect of publishing arrests of drunken drivers on the level of accidents?
4. Does the choice of penalty, i.e., the alternative of a fine vs. detention or of larger vs. smaller fines or longer vs. shorter sentences influence the level of drunken driving accidents?

5. Does the degree of certainty of punishment bear heavily on the outcome?
6. Does swiftness of punishment vs. prolonged delay in processing cases through the courts and in imposing sentences influence the level of drunken driving accidents?

In answering these questions, we are certain we will make substantive contributions to social control. Finally, we will evaluate our results with respect to making policy decisions.

4. MINIMIZING THE SOCIAL COST OF DRUNK DRIVING \$119,230
 National Institute of Mental Health 11/1/74-10/31/76

ABSTRACT

The same as the preceeding one. Only the funding agencies are different between the two grants.

COMMENT

This project is in its second year. Completion of research is expected by the middle of the forthcoming Fall Quarter. Preliminary versions of papers have been completed by the principal investigators that will provide a challenge to existing beliefs in regard to the control of drunken driving.

5. BIOMEDICAL SCIENCES SUPPORT GRANT Yr. 01 \$1,658
 National Institute of Health 4/1/75-3/31/76

Allocated percentages to CORI from NIH and NIMH project grants; Yr 01, \$50,738

A PROPOSAL TO MEASURE THE EFFECTIVENESS OF PERINATAL CARE IN CALIFORNIA HOSPITALS

Faculty: Ronald L. Williams, Assistant Professor of Economics

ABSTRACT

First year funds will be used by Ronald L. Williams for data analysis of the effectiveness of medical care delivered to newborns for all hospitals in California during 1972.

While a number of techniques exist and have been applied for measuring hospital quality on the structural and process levels, e.g., accreditation and medical audits, there has been virtually no operational success in measuring the effectiveness of medical care based on patient outcome. The research proposed by Prof. Williams will seek to remedy that unfortunate situation by performing a prototype statistical analysis upon which more elaborate studies can be based. Funds in the amount of \$940 have been provided by the Office of Research Development to provide funding for the computer time required to complete this research. Data tapes are being supplied at no cost by the State Department of Health. The cost of supplying these tapes has been estimated at in excess of \$2,000. Thus a project valued at approximately \$5,000 has been facilitated by this grant of NIH funds.

COMMENT

This funding and subsequent research has been instrumental in getting approval of the grant "Intrauterine Growth and Neonatal Risk in California," for which funding is expected as of July 1.

6. BIOMEDICAL SCIENCES SUPPORT GRANT	Yr. 02	\$2,679
		4/1/76-3/31/77
National Institute of Health		
Allocated percentage to CORI from NIH and NIMH project grants:	Yr. 02,	\$46,503

COMMENT

This is the second year of funding resulting from opportunity funds provided by the National Institute of Health based on the level of current funding on health related projects by NIH and NIMH. The decision on the expenditure of these funds is pending.

7. DIVORCE: AN ECONOMIC APPROACH

\$37,485

National Institute of Health

5/1/75-4/30/77

Faculty:

M. Bruce Johnson, Department of Economics

Michael Ward, Department of Economics

Student:

Michael Nakada, Research Assistant

ABSTRACT

Our objective is to develop a theory which explains and forecasts the trends in divorce rates in the United States. Our particular emphasis will be on the role of changing labor market opportunities available to men and women. The estimated model will be a useful tool with which to predict the future course of marital status, for the purpose of forecasting fertility rates and for the planning of various governmental programs relating to welfare, job retraining, and the provisions of public services generally.

The model will be estimated using pool cross-sections of census data and longitudinal data. Our motivation in using several census data sets is to test the hypothesis that a structural (i.e., attitudinal) change has occurred in the relationship between various soci-economic variables and marital instability.

COMMENT

This project is in its second year. Progress has been promising and results at this point lead to the expectation that the research will be regarded as a successful contribution to the prediction of fertility rates based on social and economic variables.

8. THE INTERNAL RATE OF RETURN ON 1954-1962 OCS OIL
AND GAS LEASE SALES AND AN APPRAISAL OF THE EFFECTIVENESS
OF THE BONUS BIDDING PROCEDURE

\$30,251

U.S. Department of the Interior-Geological Survey

10/75-9/76

Principal Investigator: Walter J. Mead

Student: Russell M. Jones

ABSTRACT

This research will estimate the internal rate of return earned by lessees on all OCS oil and gas leases issued during the years 1954 through 1962. In addition, through multiple regression analysis, we will determine the effect on the rate of return of each of the following variables: (1) joint ventures vs.

solo bids, (2) size class of the largest firm in a joint or solo bid, (3) amount of the high bid, (4) development vs. wildcat sale, and (5) trend. We will then evaluate the effectiveness of the existing bonus bidding system relative to (1) royalty bidding, (2) profit share bidding, (3) work program bidding, and other alternatives currently being proposed.

COMMENT

This project is in the stage of data analysis and the investigators are in the process of developing algorithms for estimating rates of return and completing the programming to make these operational. Results will be completed in time to meet the deadline of September 30.

9. INTRAUTERINE GROWTH AND NEONATAL RISK IN CALIFORNIA \$4,986
State of California Health and Welfare Agency 11/75-1/76
Principal Investigator: Ronald L. Williams

ABSTRACT

A total of 1,424,637 linked vital records describing the natality-mortality experience of infants born in California from 1966 through 1970 will be analysed to produce quantitative measures of intrauterine growth and neonatal risk of death. A monograph describing the analytical technique and presenting graphical results for use in clinical situations will be printed and delivered to the Department of Health.

COMMENT

This research has been completed and 1200 copies of the final report "Intrauterine Growth and Neonatal Risk in California" has been distributed to physicians and hospital authorities in California. The report provided the medical community with appropriate standards for assessing the adequacy of intrauterine growth and neonatal risk for California newborns. Statistical results are presented in a format intended to be useful for classifying newborn infants by birth weight and gestational age. Vital record data on 1,424,637 single births and 29,837 multiple births are stratified by ethnic group, sex, and plurality. Although the substantive results are likely to be of interest to researchers and scholars, the report emphasizes the clinical use of graphical results. Methods of statistical analysis and the limitations of the data are discussed in the Appendix of the report. It is hoped that these improved quantitative standards will be useful to the many professional groups concerned with improving the care of newborn infants- obstetricians, pediatricians, neonatologists, nurse-midwives, public health workers, and statisticians.

10. PROJECT FOR RESEARCH IN STUDENT LEARNING

\$39,775

National Institute of Education

6/73-8/75

Faculty:

Donald R. Winkler, Department of Economics

Student:

Ronald Lafferty, Research Assistant

ABSTRACT

The proposal focuses on some issues which have been largely overlooked in the debate about the importance of the school environment as a determinant of student scholastic performance. Specifically, we propose to test three hypotheses dealing with (1) the impact of the school environment over time, (2) the locational choices of teachers, and (3) the interrelationships between the student's sense of fate control, the amount of school inputs he receives, and his scholastic achievement. The procedures employed in testing these hypotheses are similar to the extent they will all utilize the same body of data and assume the same general model of learning.

COMMENT

There are three parts to the study. The first part is concerned with the endogeneity of resources in the school. For the district studies, we could find no relationship between teacher location and student achievement levels. The second part is an analysis of the productivity of school inputs over the second life of the child. We found that productivity increases with grade level for high income, high achieving students but decreases with grade level for low income, low achieving students. The results provide some support for focusing compensatory education in the early grades but provide no support for providing special early childhood educational programs to all children. The third part of the study is an analysis of how pupil attitudes towards the future are formed and what role these attitudes play in learning.

A final report consisting of a summary of the findings and their policy implications followed by several technical papers dealing in depth with each aspect of the project was submitted to the funding agency on August 25, 1975. The research project was very fruitful and generated several interesting results.

11. STUDY OF ALTERNATIVE LOCATIONS OF COAL-FIRED ELECTRIC GENERATING PLANTS TO SUPPLY ENERGY FROM WESTERN COAL TO THE DEPARTMENT OF WATER RESOURCES

(Sub-contract)

\$8,862

California Department of Water Resources (Total project funded through UCLA)

10 months

Principal Investigator: Dean E. Mann

Student: Julian Pineda, Research Assistant

ABSTRACT

The Department of Water Resources (DWR) is considering all viable alternatives for obtaining electric energy for the operation of the pumps of the State Water Project. The purpose of this proposed study is to determine the feasibility of DWR's obtaining electric energy from coal-fired generating plants. The study will consider power plants located in Utah or other western states and electric transmission to California; alternatively, the study will investigate locating a coal-fired plant in the southeastern part of California with the coal to power the plant being delivered from Utah or other states to the plant by either unit train or slurry pipeline. The study is to be performed in four phases.

At least three states are necessarily involved: Utah, Nevada, and California. California State commissions, such as the Air Resources Board and the Coastal Commission, are reported to guard jealously against the intrusion of coal-fired powerplants into certain regions of the State. Environmental groups are very active in California and are becoming increasingly restless in Utah. The role of California's Energy Resource and Development Commission in controlling the siting of powerplants will evidently be strong.

Institutional constraints arise out of the alignment of many of these interest groups. It is important to assess the possible institutional alignments which would favor the construction of the proposed DWR coal-fired powerplant, at different sites, the alignments that would oppose certain solutions favored by purely technical and economic considerations, the incentives for such alignments and the incentives for achieving some accommodation of interests. It will be important also to assess the appropriate or desirable institutions and procedures for achieving such accommodation.

Of special importance is the attitude of the state governments towards the construction of coal-fired powerplants and the utilization of scarce water resources. An alignment of the governments of Utah, Nevada, and California towards one solution for the plant siting might be as important as the alignment of technical and economic factors favoring a particular solution. The political science component will consider these problems to help establish constraints in selecting the most promising scenarios.

12. DECISION-MAKING IN THE COLORADO RIVER BASIN Yr. 03 \$19,695

National Science Foundation 6/1/76-5/30/77

Principal Investigator: Dean E. Mann

ABSTRACT

The first two years of this segment of the political science element of the Lake Powell Research Project were dedicated to gaining an understanding of the political, economic and social forces that created the institutional framework that governs the Colorado River. This was accomplished by reviewing

the major decisions that were made with respect to management of the Colorado River beginning in 1922, but centering on the passage of the Colorado River Storage Project Act of 1956. This Act was a key in this research effort in that it authorized the creation of Lake Powell, the principal physical structure for the water developments that were expected to take place in the Upper Basin.

The second two-year period has been dedicated to an understanding of the dynamics of the decision-making system, particularly under the impact of the powerful forces of the environmental movement and the increased demands for energy resources from the Upper Basin region.

Efforts are currently being directed toward an understanding of the institutional framework within which decisions are being made with respect to energy matters. The goal of this effort is to explore the feasibility, acceptability and policy consequences of various alternative institutional arrangements for decision-making in the Colorado River Basin. The principal effort of this last year of the political science component of the Lake Powell Research will be directed toward the completion of the integrated report outlined in the consolidated proposal to the National Science Foundation for the period 1974-76. Professor Charles Drake of Dartmouth College and Professor Dean Mann will share the responsibility for writing this report.

OTHER ACADEMIC PROJECTS

I. MEETINGS AND SEMINARS

A. Tri Counties Planning Directors Association

The Planning Directors of the counties of San Luis Obispo, Santa Barbara and Ventura, as well as the Planning Directors of the cities within these counties, meet periodically with faculty in seminars sponsored by CORI.

B. Seminars hosted by CORI and the Urban Economic Program

1. Mr. Norm Puff, Ventura County Planner
2. Mr. Carl Kraemer, former Assistant Planner, County of Santa Barbara
3. Mr. Phil Hawthorne, Director, Ventura County Association of Governments
4. Mr. William Cook, Santa Barbara County Assessor
5. Mr. Howard Buchalter, Ventura County Economic Planner
6. Mr. John Atha, Santa Barbara County Associate Area Planner

II. PUBLICATIONS

A. Working Papers

1. Llad Phillips and Harold L. Votey, Jr., "Job Opportunities, Deterrence, and the Detention of Heroin Addicts: An Econometric Evaluation of Options for the Control of Property Crime."
2. Llad Phillips, "The Logistics of Driving While Drunk."
3. Donald R. Winkler and Jozef M. Ritzen, "The Revealed Preferences of a Local Government: Black/White Disparities in Scholastic Achievement."
4. Jozef Ritzen, Donald R. Winkler, with Shawn Hargreaves-Heap, "Teacher Preferences with Respect to the Level and Distribution of Scholastic Achievement."
5. Perry Shapiro, "Aggregation, Social Choice and the Existence of a Social Utility Function."
6. Harold L. Votey, Jr., "The Control of Drunken Driving: The Deterrent Effects of Law Enforcement and Control of Alcohol Consumption in Two Countries that Believe in Strong Measures."
7. Peter H. Merkl, "Drunk Driving Legislation in Austria."
8. Jack D. Douglas, "The Effects of Mass Media and Educational Programs on Problems of Drinking Driving."

9. Daniel Gregory, "Alcoholism in France--The Scope and Cost of the Problem."

B. Papers

1. Llad Phillips and Harold L. Votey, Jr., "An Economic Basis for the Definition and Control of Crime," Modeling the Criminal Justice System.
2. Jozef Ritzen and Donald Winkler, "On the Optimal Allocation of Resources in the Production of Human Capital," forthcoming in a book edited by Hector Correa, Department of Economics, University of Pittsburgh.
3. Josef Ritzen and Donald Winkler, "The Revealed Preferences of a Local Government; Black/White Disparities in Scholastic Achievement," forthcoming in the Journal of Urban Economics.

C. Reports

1. Donald R. Winkler, "Final Report: University Requirements and Resource Allocation in the Determination of Undergraduate Achievement."
2. Ronald L. Williams, "Final Report: Intrauterine Growth and Neonatal Risk in California."
3. Research Reports in Public Policy (Intern Project Reports)
 - a. William Lee, "Public Park Acquisition: The Saticoy Golf Course."
 - b. Robert A. Leiter, "Fiscal Effects of Residential Growth: An Analytical Model With Comparative Case Studies."
 - c. George E. Goldman and Anthony Nakazawa, "An Input-Output Model of Santa Barbara County, California: With an Emphasis on Agriculture."
 - d. Mary Streitwieser Jones, "A Municipal Tax Revenue Forecasting Model: The City of San Buenaventura, A Case Study."
 - e. Howard Buchalter, "Land Use Alternatives Using Input-Output Analysis."
 - f. Dennis Muraoka, "Allocation of Space Requirements For a Local Government,"
 - g. _____, "The Effects of Inflation on Local Government Expenditures."
 - h. David R. Branchcomb, "Burglary Prevention: An Investment Analysis of Residential Protection."

FISCAL SUMMARY

U.C. Core Budget		Extramural Funds-Expenditures	
Sub-0	\$11,680	Sub-0	\$
Sub-1	5,178	Sub-1	
Sub-2	394	Sub-2	131,759
Sub-3	1,019	Sub-3	14,032
Sub-4		Sub-4	250
Sub-6		Sub-6	10,012
TOTAL	\$18,271	TOTAL	\$156,053

STATISTICAL SUMMARY

1a) UCSB academic staff engaged in research and training:			
a) Faculty	18	d) Postdoctoral	0
b) Professional Researchers	1	e) Graduates	33
c) Specialists	3	f) Undergraduates	1
		TOTAL:	<u>56</u>
1b) Participation from other campuses:			
a) Faculty	5		
		TOTAL:	<u>5</u>
		See Appendix A	
2) Number of employees in unit:			
a) On University funds:	9		
b) On Non-University funds:	26		
		TOTAL:	<u>35</u>
3) FTE:	<u>University</u>	<u>Non-University</u>	
a) Professional		5.71	
b) Technical		1.52	
c) Administrative	.40	2.24	
d) Clerical	.69	.71	
	<u>1.09</u>	<u>10.18</u>	TOTAL: <u>11.27</u>
			See Appendix B-1
4) Number of publications: (See page 20)			TOTAL: <u>20</u>
5) Number of proposals submitted:			TOTAL: <u>17</u>
			See Appendix B-2
6) Amount of space currently occupied:			TOTAL UNITS: <u>7</u>
			See Appendix C

APPENDICES

- A. UCSB STAFF ENGAGED IN RESEARCH
AND TRAINING
- B. PARTICIPATION FROM OTHER CAMPUSES
- C. PROPOSALS SUBMITTED

APPENDIX A

UCSB STAFF ENGAGED IN RESEARCH AND TRAINING

I. PROJECTS IN PROGRESS

A. Urban Extension Internship Training Program (NSF)

Faculty

- a. Perry Shapiro, Assoc. Prof., Economics, Director
- b. Lloyd Mercer, Assoc. Prof., Economics, Chairman, Dept. of Economics
- c. Harold L. Votey, Jr., Prof., Economics, Steering Committee
- d. W. Douglas Morgan, Assoc. Prof., Economics, Coordinator
- e. William Comanor, Prof., Economics
- f. Robert Deacon, Asst. Prof., Economics, Steering Committee
- g. B. Ambrecht, Asst. Prof., Poli. Sci.
- h. John Moore, Assoc. Prof., Poli. Sci.
- i. Donald Winkler, Asst. Prof., Economics, Steering Committee
- j. John M. Marshall, Assoc. Prof., Steering Committee
- k. Alan Wyner, Assoc. Prof., Poli. Sci.
- l. Vinod Agarwal, Lecturer, Economics

Students

- a. J. Amano
- b. E. Rosamond
- c. T. Thorpe
- d. R. Zaft
- e. R. Young

Graduate Students

- Third Cohort
- a. David Branchcomb
 - b. John Dimperio
 - c. Jack Jenkins-Stark
 - d. Darrell Joyner
 - e. Edward Kleeman
 - f. Richard Liebermann
 - g. Dennis Muraoka
 - h. Carl Perelli Minetti
 - i. Lynn Morecraft
 - j. Gary Toeller

Full Time Program

- Fourth Cohort
- a. Rosalie Calderone
 - b. Ruth Ann Collins
 - c. Robert Dye
 - d. William DeLoreto
 - e. William Hart
 - f. Steve Edison
 - g. Barry Hyman
 - h. Michael Kahoe
 - i. Kenneth Miller
 - j. Margaret Magnus
 - k. Gail Ryff
 - l. Jeffrey Newton
 - m. Mark Wilkins

B. Cycles in Fertility, Mortality and Economic Conditions

Faculty

- a. Llad Phillips, Assoc. Prof., Economics
- b. Harold L. Votey, Jr., Assoc. Prof., Economics

Students

- a. Stephen Haynes, Research Assistant

C. Minimizing the Social Costs of Drunken Driving

Faculty

- a. Jack D. Douglas, UCSD, Prof., Sociology
- b. Peter Merkl, Prof., Poli. Sci.
- c. Llad Phillips, Assoc. Prof., Economics
- d. Harold L. Votey, Jr., Assoc. Prof., Economics
- e. Daniel Gregory, Lecturer, Poli. Sci.
- f. Dieter Raabe, Asst. Specialist

D. A Proposal to Measure the Effectiveness of Perinatal Care in California Hospitals

Faculty

- a. Ronald L. Williams, Asst. Prof., Economics

E. Divorce: An Economic Approach

Faculty

- a. M. Bruce Johnson, Prof., Economics
- b. Michael Ward, Lecturer, Economics

Students

- a. Michael Nakada

F. The Internal Rate of Return on 1954-62 OCS Oil and Gas Lease Sales and an Appraisal of the Effectiveness of the Bonus Bidding Procedure

Faculty

- a. Walter J. Mead, Prof., Economics

Students

- a. Russell Jones

G. Intrauterine Growth and Neonatal Risk in California

Faculty

- a. Ronald L. Williams, Asst. Prof., Economics

H. Project for Research in Student Learning

Faculty

a. Donald R. Winkler, Asst. Prof., Economics

Students

a. Ronald Lafferty

I. Study of Alternative Locations of Coal-Fired Electric Generating Plants to Supply Energy from Western Coal to the Department of Water Resources

Faculty

a. Dean E. Mann, Prof., Poli. Sci.

Students

a. Julian Pineda

J. Decision Making in the Colorado River Basin

Faculty: Dean E. Mann, Prof., Poli Sci.

APPENDIX B

II. PARTICIPATION FROM OTHER CAMPUSES

A. Minimizing the Social Cost of Drunken Driving

Faculty: Jack D. Douglas, Professor, Sociology, U.C. San Diego.
Co-principal Investigator with Professors Phillips, Merkl,
and Votey, over the life of the project.

B. The Internal Rate of Return on 1954-1962 OCS Oil and Gas Lease Sales and An Appraisal of the Effectiveness of the Bonus Bidding Procedure

Faculty: Philip Sorenson, Department of Economics, The Florida State
University, Tallahassee, Florida, consultant with Professor
Mead, over the life of the project.

C. Project for Research in Student Learning

Faculty: Joseph Ritzen, Lecturer, Economics, U.C. Berkeley, Co-principal
Investigator with Professor Winkler, over the life of the project.

D. Study of Alternative Locations of Coal-Fired Electric Generating Plants to Supply Energy from Western Coal to the Department of Water Resources

Faculty: Orson L. Anderson, Professor, Institute of Geophysics &
Planetary Physics, U.C.L.A., Principal-Investigator with
Professor Mann, over the life of the project.

E. Decision-Making in the Colorado River Basin

Faculty: Charles Drake, Professor, Dartmouth College, collaborator
with Professor Mann on Final Report of the project.

APPENDIX B-1

FTE ASSIGNED TO THE INSTITUTE

	<u>Name</u>	<u>Title</u>	<u>FTE</u>
I. PROFESSIONAL			
A. Academic Year			
	1. Harold L. Votey, Jr.	Principal Investigator	.33
	2. Peter Merkl	Principal Investigator	.33
	3. Walter Mead	Principal Investigator	.67
			1.13
B. Eleven Month Appointment			
	1. Daniel P. Gregory	Associate Specialist	.25
	2. Dieter Raabe	Assistant Specialist	.17
	3. Michael Ward	Specialist	1.25
	4. Ronald L. Williams	Principal Investigator	.10
	5. William Ewald	Research	0
			1.77
C. Summer 1975 (2/9 = 1.00)			
	1. Harold L. Votey, Jr.	Principal Investigator	1.50
	2. Llad Phillips	Principal Investigator	1.50
	3. Jack D. Douglas	Principal Investigator	1.50
	4. Peter Merkl	Principal Investigator	1.50
	5. M. Bruce Johnson	Principal Investigator	.50
	6. Donald Winkler	Principal Investigator	.75
			7.25
D. Summer 1976 (2/9 = 1.00)			
	1. Dean Mann	Principal Investigator	.25
	2. Peter Merkl	Principal Investigator	.25
	3. Jack D. Douglas	Principal Investigator	.25
	4. Harold L. Votey, Jr.	Principal Investigator	.25
	5. Llad Phillips	Principal Investigator	.25
			1.25
II. TECHNICAL			
A. Academic Year			
	1. Russell Jones	Research Assistant	.25
	2. Michael Nakada	Research Assistant	.25
	3. H. Amano	Assistant	.02
	4. Robyn Zaft	Assistant	.02
	5. Ennis Rosamond	Assistant	.01
	6. Thomas Thorpe	Assistant	.07
	7. Stephen Haynes	Postgraduate Research	.13
			.75

B.	<u>Summer</u> (2/9 = 1.00)		
1.	Julian Pineda	Research Assistant	.03
2.	Michael Nakada	Research Assistant	1.20
3.	Ronald Lafferty	Research Assistant	.60
4.	Thomas Thorpe	Research Assistant	.25
5.	Russell Jones	Research Assistant	.25
			<u>2.33</u>

III. ADMINISTRATIVE

A.	<u>Academic Year</u>		
1.	Harold L. Votey, Jr.	Acting Director	.40
2.	W. Douglas Morgan	Director, Urban Training Program	.67
			<u>1.07</u>
B.	<u>Summer</u> (2/9 - 1.00)		
1.	Perry Shapiro	Director, Urban Training Program	.75
2.	W. Douglas Morgan	Intern Supervisor	.50
3.	Biliana Ambrecht	Training Supervisor	.50
4.	William Comanor	Training Supervisor	.50
5.	Robert Deacon	Intern Supervisor	.75
6.	John E. Moore	Training Supervisor	1.00
7.	Alan J. Wyner	Training Supervisor	.50
8.	Donald L. Winkler	Training Supervisor	.25
			<u>4.75</u>

IV. CLERICAL

1.	Barbara Hagen	Secretary, Institute Secretary, Urban Training Program and others	.50
2.	Denise May	Sr. Typist Clerk	.26
3.	Sharon Bettencourt	Typist Clerk	.01
4.	Winifred Harris	Typist Clerk	.03
5.	Leslie White	Typist Clerk	.02
6.	Teri Townsend	Typist Clerk	.05
7.	Cindy Asendorf	Typist Clerk	.01
8.	Kathy Buttermore	Typist Clerk	.02
			<u>1.40</u>

SUMMARY

Academic Year Appointments

I. Professional		1.13
II. Technical		.75
III. Administrative		<u>1.07</u>
		2.95

Summer (2/9 = 1.00 x .33, i.e., weighted
by .33 of regular year)

I. Professional	8.50 x .33	2.81
II. Technical	2.33 x .33	.77
III. Administrative	4.75 x .33	<u>1.57</u>
		5.15

Full Year Appointments

I. Professional		1.77
II. Clerical		<u>1.40</u>
		3.17

Weighted Total FTE 11.27

APPENDIX C

PROPOSALS SUBMITTED

1. MINIMIZING THE SOCIAL COST OF DRUNKEN DRIVING

\$108,322

National Institute of Mental Health

11/1/75-10/31/76

Principal Investigators:

Jack D. Douglas, Sociology, UC San Diego

Peter Merkl, Political Science

Llad Phillips, Economics

Harold L. Votey, Jr., Economics

ABSTRACT

The plan of this proposed interdisciplinary research project is to examine a specific problem of social control: the minimization of the social losses from drunken driving. The goals of the research are (1) to examine and catalog the various methods for achieving social control of drunken driving in the United States and several western European countries, (2) to compare and contrast European methods and effectiveness with the American experience, and (3) to indicate the control options available to policy-makers given the degree to which they are constrained by culturally determined attitudes and political realities in the different countries. The study will consist of three phases. Phase I will be an evaluation of the political process as it affects social control. Phase II will involve the formulation of behavioral models appropriate for comparing performance between countries. Phase III will consist of an evaluation of the empirical studies to determine their implications for policy. The research team consists of members from the fields of criminology, economics, political science, and sociology.

Phase I through III are well underway, with both time series and cross section data collected from England and Wales, France, Denmark, East and West Germany, the Netherlands, Norway, Sweden, Switzerland, and the U.S. Extensive visits with researchers, policymakers, and enforcement authorities have been completed in all of the countries from which data has been fathered. Preliminary statistical estimates have been done and work is underway to complete this phase of the work. Political analysis and writing is underway.

At this stage we are requesting supplemental funding to facilitate a small conference involving authorities on the problem from the countries under study, so that research findings and policy recommendations can be subjected to additional input and critical evaluation by those persons best qualified to do so. In this way, recommendations will involve the participation of key policy-makers in countries where they might be put to use.

2. A. ACCESS--ENVIRONMENTAL OPTIONS PILOT RESEARCH TEST \$496,095
DHEW Office of Education 12 months

Principal Investigator: William Ewald

ABSTRACT

The goal of the ACCESS (Alternative Comprehensive Community Environmental Study System) project is that of verifying and demonstrating a multi-faceted process which can increase the productivity/effectiveness of the decision-maker regarding actions related to or impacting on the quality of human settlements--the physical, cultural, social and economic environment of a region. The project design assumes that the most recurring and pressing decision-making tasks within a region require:

1. consideration of complex, interrelated and interactive facts, elements, issues (including scientific, technological, economic, social and political);
2. consideration of the long-term as well as immediate consequences of decisions to the total "environment" of the region;
3. education or self education of all who take part in the policy-making activity;
4. the involvement of an informed citizenry in different ways depending on the nature of the problem or issue; and
5. easy access to data, methods and other resources, appropriately selected and "packaged" for objective, comprehensive, and comprehensible communication of the information needed for the task.

The process incorporates the exploratory use of (1) interactive graphics and other visual media as an approach to the problems of efficient and effective communication of complex and extensive data/information in unbiased and interdisciplinary ways for problem-solving and decision-making purposes; (2) structured dialog among individuals from different professional backgrounds and interests for the purpose of identifying appropriate (socially and values-sensitive) contexts for the consideration of data/information and decision-making; (3) creative environments (i.e., the Regional Situation Room) to encourage self education, participation and informed input to the information base and the decision-making process by interested citizens; (4) public dissemination mechanisms for the purpose of keeping the general public informed and more supportive of decisions and policies made; and (5) a variety of mechanisms/methodologies for feedback and formative evaluation of the total process as well as its various components.

COMMENT

To date \$211,435 of Federal funds have been committed to this project jointly by DHEW, (Office of Environmental Education), U.S. Dept. of Agriculture, (Forest Service), and the U.S. Dept. of Commerce (EDA). A further \$50,000 is expected momentarily from the Environmental Protection Agency. Additional funding in the amount of \$100,000 is in the final stages of review by ERDA and HUD. The final increment of funding is being sought from NSF-RANN.

2. B. EVALUATION--ACCESS PILOT TEST PROJECT

\$106,435

U.S. Office Education (Environmental General)

12 months

Principal Investigator: Dean Mann, Political Science

ABSTRACT

This evaluation is expected to provide an independent assessment of the workability of the ACCESS concept with respect to the elements that are involved in the two pilot projects. The evaluation will be independent in the sense that evaluators will be researchers from the faculty of the University of California not involved in the development or implementation of the two pilot projects. Such an evaluation is essential if grantors are to consider the allocation of further resources to broader scale experimentation with the ACCESS prototype. It is likewise essential, if this test is to be used as a justification for the Santa Barbara community to proceed on its own with similar projects or if other communities are to make use of the ACCESS prototype, as it has evolved thus far, in designing programs to utilize the principles of the ACCESS concept for their own decision-making problems.

COMMENT

The Office of Education has firmly committed funds in the amount requested.

3. CREATING A NEW PROFESSIONAL PERSON: THE PUBLIC HISTORIAN

\$401,279

\$340,813

National Endowment for the Humanities
The Rockefeller Institute

3 years

Principal Investigator: Robert Kelley, History

ABSTRACT

This proposal requests support for a pioneering graduate program which aims at creating a new professional person: the Public Historian. It will admit its first students in fall, 1976. It seeks to train students to serve as research historians who will work within the community at large, rather than on the staffs of academic institutions. Leading to the master's and doctor's degrees in history (based upon specifically designed curricula which blend traditional studies with this new focus), it specifically focuses upon the urban setting, and upon problem-oriented research. The purpose is to add a new element to the decision-making process currently at work within local communities: analysis through the historical method. Additional concerns are providing leadership to the awakening concern in communities with a recapturing and appropriate display and understanding of their own pasts. The Public Historian will be trained to write highly focused and localized historical studies of existing problems; to enter employment in Federal and state history programs, as yet a profession inchoate and without focus; to take up positions in private corporations, newspaper offices, law partnership research agencies; and to learn how to create programs of public outreach which make the results of research available and intriguing to the public at large, demonstrating the usefulness of humanistic scholarship.

4. INCENTIVES WHEN RISKS ARE INSURED: HEALTH AND LIABILITY INSURANCE \$9,998

S.S. Huebner Foundation for Insurance Education 6 months

Principal Investigator: John M. Marshall

ABSTRACT

This application seeks support for research into the way insurance alters incentives to prevent or reduce loss. Clearly incentives constitute an important general problem in the theory of insurance, and research into specific instances of the incentive problem assists in understanding it.

The grant would support study of incentives in two specific areas, health and liability insurance. Both areas have intrinsic interest as well as relationships to broader concerns. The research will be done primarily using the theoretical methods of the Arrow-Hirshleifer, state-preference or contingent-claims characterization of contracts under risk. Some support is asked for gathering background information which is necessary to buttress theoretical analysis in the area of liability insurance, particularly in professional liability insurance.

Research under the grant should produce two papers of a length suitable for journal publication.

5. A CONFERENCE ON THE ALTERNATIVES FOR THE CONTROL OF DRUNKEN DRIVING \$54,401

An Extension of the Project: Minimizing the Social Cost of Drunken Driving

The Ford Foundation 1 year

Principal Investigators:
 Harold Votey, Jr., (Project Leader), Economics
 Jack D. Douglas, UCSD, Sociology
 Peter Merkl, Political Science
 Llad Phillips, Economics

ABSTRACT

This is a proposal to organize a conference on comparative approaches to the control of drunken driving in the United States and a number of West European countries. The purpose of the conference is to bring together scholars and policy-makers in this field of endeavor with the principal investigators of a major comparative study of drunk driving control which will be completed by the time of the conference.

6. DYNAMICS AND INTERDEPENDENCE IN THE BALANCE OF TRADE:
AN EMPIRICAL INVESTIGATION \$45,191

National Science Foundation 1 year

Principal Investigator: Stephen E. Haynes

Co-Principal Investigators:
John Pippenger
Llad Phillips

ABSTRACT

The intent of the study is to examine the dynamic interactions among trade flows, relative prices, and real income. Existing empirical research generally assumes that prices and income effect trade flows in a simple contemporaneous fashion, and that reverse causality is unimportant. The proposed study alternatively assumes that trade flows and prices are simultaneously determined within a dynamic system.

Simultaneous equation models are postulated which explicitly indicate that domestic and foreign prices are influenced by trade flows. These models are consistent with the well-documented sensitivity of trade flows to variations in prices and income, and in addition predict interdependence of prices between countries. Further, the models postulate alternative specifications of dynamic adjustment.

These theoretical formulations will be tested with the techniques of spectral analysis and estimated with time domain simultaneous equation methods. The spectral technique is employed because of its value in examining simultaneous relationships and decomposing these relationships into short and long-run components. This method of dynamic analysis is novel; past spectral studies are essentially correlation analysis because theoretical structures are not explicitly tested.

The proposed study will fill a long-standing gap in our knowledge of the dynamic relationships of the trade account, and be a valuable guide to ongoing international research such a Project LINK. In addition, it will develop and refine a general empirical framework within which to examine the major issues concerning economic interdependence in an open economy.

7. IDENTIFYING THE DOLLAR VALUE OF NON-MARKET
(ENVIRONMENTAL AND GOVERNMENTAL) GOODS AND SERVICES \$120,300

National Science Foundation 1 year

Principal Investigator:
Perry Shapiro, Economics

ABSTRACT

This research would identify the marginal value to the consumer of non-market goods, such as environmental quality and other goods that are collectively supplied. The research design incorporates the effects of both market price and income variation on these valuations. It is important to incorporate these effects because the marginal rates of substitution between pairs of market and non-market goods are not likely to be the same at different levels of real income or for different sets of relative prices; in fact, casual observation as well as empirical research suggests the opposite is true.

In order to isolate the private evaluations of environmental and governmental goods (which are here called e-type commodities) the hypothesis of a residential location, or spatial, equilibrium will be maintained. The implication of this condition is that all people within a homogeneous group, i.e., those with the same tastes and in the same occupation with the same amount of human capital, are indifferent between any two locations. For example, a white, middle-aged computer programmer, with ten years work experience and a bachelor of science degree, should be indifferent between his wage rate, market prices and e-type goods in Gary and his potential wage rate, market prices and e-type goods in Tucson. If one area were preferable to another, there would be migration from the least preferred to the most preferred area. In the process either prices in the preferred area are driven up and/or wage rates are driven down relative to the inferior area. The differences in the ability to purchase market goods and services will exactly equalize the additional utility received from e-type goods.

Fortunately, there now exists a single, integrated data file which provides all the information required to make the proposed computations. The BLS 1973 Consumer Expenditure Survey, which was undertaken to revise the Consumer Price Index, provides detailed information on market expenditure and income for over 10,000 U.S. households. Since this data file identifies the location and income of the household, as well as the earnings, occupation and industry of employment for the head of the household, these locational comparisons can be made for narrowly defined groups of households having similar circumstances.

Measurements and proxies of measurement for nonmarket goods which will be required for the estimation can be obtained from a variety of existing sources. Detailed climatological data for 13,000 weather stations can be obtained from the Environmental Data Service of the U.S. Department of Commerce. Uniform Crime Reports present possible inverse measure of public safety in metropolitan area, while other federal agencies collect a variety of data in an attempt to monitor the effectiveness of other aspects of state and local fiscal policy. In general, other measures would be suggested by the voluminous literature on social indicators.

8. QUANTIFYING THE VALUE OF IMPROVEMENTS IN INFORMATION
AS A BASIS FOR SETTING PRIORITIES IN NATIONAL STATISTICAL
SYSTEMS, AND EXPLORATION OF THE INFORMATION BASES OF POLICY MODELS \$72,986

National Science Foundation

18 months

Principal Investigator: J. K. Sengupta, Professor of Economics

This proposal requests support for the University of California, Santa Barbara portion of a collaborative research project with Dr. Karl A. Fox, of Iowa State University.

ABSTRACT

Sengupta's objectives are to explore (with the aide of a research associate to be selected by him at UCSB) three aspects of informational support for quantitative economic policy or decision models: (1) the design of weighting schemes for combining statistical variables which take account of the informational aspects of data availability, reliability, and updating prior to final specification and estimation of the model as well as in its subsequent use; (2) the incorporation of feedback and feed-forward forecasting elements in policy models to take account of improvements in informational efficiency and reliability overtime; and (3) the incorporation into policy models of the effective constraints of the organizational frameworks within which decisions are to be made. Sengupta will give particular attention to the specific modeling problems encountered by Fox, and Fox will be on the alert for realistic and fruitful applications of the methods developed by Sengupta.

9. THE RESPONSES OF LOCAL GOVERNMENTS IN CALIFORNIA TO
SEISMIC SAFETY EVENTS \$174,214

National Science Foundation

1 year

Principal Investigators:

Dean E. Mann, Political Science

Alan J. Wyner, Political Science

John M. Marshall, Economics

ABSTRACT

California is a seismically active area; earthquakes therefore pose a genuine threat to life and property. Local governments have principal responsibility for planning and executing programs to minimize and mitigate such dangers. Local governments, however, have incentive to limit preparations for such disasters unless they have experienced an earthquake or have reason to think one is imminent. This project is designed to investigate the principal sources of resistance to earthquake damage mitigation planning at the local level. Through studies of several cities in California, some with recent earthquake experience and others without, the behavior of various participants in the local decisionmaking process will be examined to ascertain the sources of resistance to adequate seismic safety planning and the extent to which local governments learn from the experience of others. The roles of the national, state and regional governments will also be examined because of their capacity to alter the behavior of local officials. The

objective of the study is to provide officials at all levels of government and in the private sector with improved understanding of the political and economic incentives for action or inaction and alternative strategies for overcoming resistance to effective seismic safety planning.

10. STUDY OF HEALTH INSURANCE REGULATION

Social Security Administration	\$66,029
National Center for Health Services	\$50,702
Principal Investigators:	1 year
John M. Marshall, Economics	
H.E. Frech, III, Economics	

ABSTRACT

This study of health insurance concerns itself with consumer incentives, with group insurance, and with the effects of state insurance regulation. Concerning consumer incentives, it examines the implications of transactions costs and state-dependent tastes within models of allocation under uncertainty. The objective is to define circumstances which produce efficient risk-spreading and incentives, and to interpret findings of others which seem to show large waste from distorted incentives.

On group insurance, the theoretical question is whether, or when, competition in forming new groups is in the interest of the consumers. One expects more such competition in lightly regulated states, leading to more groups, smaller groups, and more persons in groups, ceteris paribus. The study tests these predictions using data for states of the U.S.

The hypothesis concerning regulation is that strong regulation gives Blue Cross and Blue Shield advantages over private health insurance companies. These advantages permit the Blues to overextend insurance coverage, producing higher-than-efficient demand for health care and a higher price of care. The magnitude of this effect is studied in a time-series-cross-sectional data set for states in the U.S. and years in the late 60's and early 70's.

11. URBAN ECONOMICS PROGRAM OPTION

Office of Education, Bureau of Postsecondary Education	\$39,024
Principal Investigator: W. Douglas Morgan, Economics	1 year

ABSTRACT

At the present time there is no financial support available to academically well qualified students in the Urban Economics Program. Moreover, while the program attempts to obtain an internship with some monetary compensation, the availability and size of agency stipends for internships in the local

area has dwindled in the last few years during times of budgetary stringency. Furthermore, for those students with a particular interest in one local government activity, eg., finance or planning, the lack of available agency compensation during the internship phase of their program has meant that their internship might be completed with an agency that does not dovetail exactly with their future interests and job desires. More importantly, many smaller local governments and social service agencies with well-defined needs and a number of useful intern projects are currently excluded from the student's choice because these agencies are not able to provide adequate monetary compensation.

The granting of Public Service Fellowships will permit the Urban Economics Program to:

- a. Attract and admit a greater number of students who have demonstrated superior academic promise and interest in the field. This will assist us in developing a well rounded program that includes ethnic minorities and women;
- b. Make use of a wider number of government and social service agencies, particularly smaller agencies with insufficient budgetary resources to hire master level interns. This will increase the diversity and type of intern projects and better meet the specific public service interests of students in the Urban Economics Program.

12. MEASURING THE EFFECTIVENESS OF PERINATAL MEDICAL CARE \$73,249

Maternal and Child Health Services, DHEW 1 year

Principal Investigator: Ronald L. Williams, Economics

Associate Investigators;

George C. Cunningham, M.D., Chief

California Dept. of Health, Maternal and Child Health

Warren E. Hawes, M.D., Chief

California Dept. of Health, Infant Health Unit

Frank D. Norris, Sr. Public Health Statistician

California Dept. of Health

Roderic H. Phibbs, M.D., Assoc. Prof. of Pediatrics

UCSF

ABSTRACT

This project will define and measure a quantitative index of the quality of perinatal care as delivered in hospitals. The index will consider the newborn's race, sex, and health status prior to birth as external to the hospital and use accurate estimations of the expected risk of death to adjust observed perinatal mortality rates. Estimates of the index and its standard error will be made for approximately 400 California hospitals using up to 2,365,217 linked birth-death records compiled on computer tape by the California Department of Health from 1966 through 1972. Data related to the process of maternity care, as compiled by the American College of Obstetricians and Gynecologists and others, will be linked by hospital to the quality indexes. Multiple linear regression techniques will be used to identify those structural and process variables influencing the quality index. In summary, the project proposes to develop a program-oriented methodology for evaluating the effectiveness of different health care delivery systems on the regional and national levels. Because the project emphasizes the application of information available from linked record files, it should demonstrate the practical value and usefulness of linking vital records by state departments of health.

COMMENT

Funding for this proposal has just been awarded.

APPENDIX C

CURRENT SPACE ASSIGNMENTS

Ellison Hall 3625B Director; Harold L. Votey, Jr.
Associate Director: Perry Shapiro (On leave)
Acting Associate Director: W. Douglas Morgan

3625C Administrative Assistant: Barbara Hagen

This space is nominally assigned to the Department of Economics and is a part of the space used primarily for the Urban Internship Training Program that is being funded by NSF under a grant made jointly to the Institute and the Department. Barbara Hagen is employed half-time by the Institute and half-time under the grant to serve the Urban Program. Thus, this arrangement in effect gives each operation a full time secretary in terms of availability to the campus community, and provides economies to the University in the utilization of space.

Both the small seminar room, 3625A and the large one, 3621 are available for Institute activities when not in use by the Urban Program or the Department of Economics.

The following rooms are assigned by the University to the Institute and are being effectively utilized as follows:

Ellison Hall 5803 This space is occupied by Richard Young, a staff research associate, who assists in the Urban Program. Michael Nakada, a research assistant for Prof. Johnson on his NIH funded project, shares this office.

Ellison Hall 5805 Ronald L. Williams, Assistant Research Economist, is assigned this space for research on his health-related projects.

North Hall 1013 This space is occupied by Stephen Haynes, Research Assistant, for Profs. Phillips and Votey on their grant from NIH.

North Hall 1015 These rooms are occupied by Professors Phillips and Votey
North Hall 1017 for their research on drunken driving, supported by grants from The Ford Foundation and NIMH. Desk space is assigned to Daniel Gregory and Dieter Raabe, specialists, assisting on the project.