# ANNUAL REPORT 1974-75

COMMUNITY AND ORGANIZATION RESEARCH INSTITUTE
Perry Shapiro, Acting Director

University of California at Santa Barbara

June 1975

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Title Page Table of Contents Advisory Committee	•		i ii iii
SECTION A			,
DIRECTOR'S STATEMENT		•	1
HIGHLIGHTS OF THE FISCAL YEAR			3
PROPOSALS SUBMITTED IN FISCAL YEAR 1974-75	5.	•	5
EXTRAMURAL GRANTS AND PROJECTS			11
PUBLICATIONS			19
OTHER ACADEMIC PROJECTS			21
SECTION B			
FISCAL SUMMARY		•	22
·	PE	NDICE	S TO SECTION A
APPENDIX A			
UCSB ACADEMIC STAFF ENGAGED IN RESEARCH AND TRAINING AND/OR PROPOSED RESEARCH			
PROJECTS IN PROGRESS		•	23
PARTICIPATION FROM OTHER CAMPUSES			25
PROJECTS PROPOSED		•	25
APPENDIX B			
FTE ASSIGNED TO THE INSTITUTE			27
	•	•	
APPENDIX C			
CURRENT SPACE ASSIGNMENTS	<i>:</i>		29

CONTENTS

# COMMUNITY AND ORGANIZATION RESEARCH INSTITUTE

Perry Shapiro, Acting Director M. Bruce Johnson, Acting Director

#### ADVISORY COMMITTEE

W. Douglas Morgan, Associate Professor, Chairman Department of Economics

David Brokensha, Professor
Department of Anthropology

Donald Cressey, Professor
Department of Sociology

Dean Mann, Professor
Department of Political Science

Perry Shapiro, Associate Professor Department of Economics

Joseph Samprone, (GSA)
Department of Economics

COMMUNITY AND ORGANIZATION RESEARCH INSTITUTE

# DIRECTOR'S STATEMENT

Although it is inevitable that the direction of the Community and Organization Research Institute would ultimately vary from its initial goals, the Institute, within broad limits, is meeting the initial goals set forth in the establishment of the Institute. These goals were to serve as a major resource for basic research in the social sciences, to train graduate students, and to make social science technicians available to interested parties in the community.

Although most of the grant activity to date has been initiated by members of the economics department, the Institute is now attracting larger segments of the University community into its activities. Notably there are two or three major grants and proposals which include members of the sociology and political science departments of UCSB. The Urban Economics Program and the proposed Training for Progress proposal is extensively designed to train graduate students in more effective community public policy. We have, through the instigation of internships in the local public sector, as well as various symposia sponsored by the Institute, attempted to make modern social science techniques available to the community.

Community and Organization Research Institute has been instrumental in establishing one new degree program on campus and is in the process of trying to establish another. It has facilitated research of many members of the faculty by providing help in writing grant proposals and administering their funding.

Grants submitted through the Institute have responded to the public need on various levels. There have been grants in health planning, criminal justice, mental health, and energy conservation which have been submitted through the Institute. Furthermore, through the Institute-sponsored Urban Economics Program, a new cadre of trained public sector managers is being provided to the local community.

In recent times the Institute has become increasingly productive in both the quantity and quality of research produced. There have been major studies in education, health, criminal justice, and in fertility undertaken under grants written through the Institute.

Although to date the amount of interdisciplinary research undertaken by the unit has been small, the recent year has seen increased activity in this area. The major research study on drunken driving includes members of the economics department, sociology and political science departments here at UCSB, as well as a member of the sociology department at UC San Diego. Furthermore, there are proposals both in urban economics and in energy research which include members of more than one department.

As the Institute has evolved, it is in a uniquely advantageous position to concentrate on policy related research. Without exception, all grants

that have been instituted by the Community and Organization Research Institute deal with the areas of scientific policy analysis.

In the future, since we have established a strong core of research and training in policy sciences, we shall continue to sponsor research in this area. We have recently appointed, as a Research Associate of the Institute, Dr. Ronald Williams who has done major research in the determination of medical care productivity. His work is widely recognized as path-breaking in this area. We shall, through his efforts, pursue a number of research opportunities in health care delivery systems. If we are successful in this effort there will evolve a major ongoing research project in this policy area. The Institute will continue to pursue research in criminal justice and population studies, as well as other areas amenable to scientific social science investigation.

It is the Director's feeling that the Institute will necessarily be forced to engage in a larger percentage of Contract Research (as opposed to grant related research) than it has done in the past. The Institute shall make a major effort to keep current in the newest Request For Proposals and attempt to interest a broader segment of the academic community in writing contract proposals than has been done in the past.

The future of the Institute lies in the aggressive pursuit of extramural contracts and the excellent completion of research. We have fortunately a first-rate director returning from sabbatical this year who will prove to be excellent in stimulating extramural grant activity. We also have established a strong nucleous of well trained professionals who are in the habit of doing very high quality research. The future prospects of the Community and Organization Research Institute are very good.

HIGHLIGHTS OF	THE	FISCAL YEAR	
September 197	4 1) 2)	Harold L. Votey, Jr., Director, takes a sabbatical leave to conduct research in Great Britain and Western Europe on "The Social Cost of Drunken Driving" with funding from The Ford Foundation  The National Institute of Mental Health "Cycles in Fertility, Mortality and Economic Conditions,"  National Institute of Health	\$ 75,000 \$129,390 \$ 51,318
		Perry Shapiro, Associate Director of the Institute, and M. Bruce Johnson, Professor, Department of Economics, are appointed Acting Co-Directors.	
		Final Report: "University Requirements and Resource Allocation in the Determination of Undergraduate Achievement," National Institute of Education, #NE-G-00-3-0151.	
		Final Report: "Perinatal Mortality and Health Services Productivity," Bureau for Health Services Research and Evaluation, DHEW, #1 R21 HS01036.	
		Proposal submitted: "Population Changes and Social Securit Transfers," National Institute of Health (not funded)	\$26,511
		The first bi-monthly meeting of the Tri Counties Planning Directors Association is hosted by UCSB and the Institute. Membership in this highly successful organization, now in its second year, consists of local city and county planning administrators. The Institute provides facilities for thes meetings, including secretarial services, and participates in policy discussions. Students from the Urban Economics Program are placed in internships in the participating agent and are frequently speakers at the Tri Counties meetings.	e
October 1974	1	Fellowship component of the AID-OAS proposal "Training for Progress" submitted to 1) AID 2) OAS	\$695,997 \$338,492
January 1975		Dr. John Snyder, Acting Head, Materials and Instruction Development Section, National Science Foundation, visits the Institute for a site evaluation in connection with the Urban Extension proposal submitted in June 1974, funding pending	\$272,155
February 1975		Proposal submitted: "Regulation of Insurance: A Theoretical and Empirical Study" to RANN, NSF	\$ <b>154,29</b> 3
March 1975		Proposal submitted: "The Dynamics of the Housing Market," doctoral dissertation to Department of Housing and Urban Development	\$ 9,696

		4
April 1975	Proposal submitted: "Intrauterine Growth and Neonatal Risk in California," State of California Health and Welfare Agency, Maternal and Child Health. This proposal has just been funded.	\$ 6,392
	Proposal submitted: "Managing California's Energy Resources: An Institutional Analysis," State Depart- ment of Energy Resources	\$ 69,388
May 1975	Funding awarded: "Divorce: An Economic Approach" National Institute of Health	\$ 17,642
	Funding awarded, second year: "Cycles in Fertility, Mortality and Economic Conditions," Public Health Service	\$ 22,637
· .	RFP submitted: "Identification of the Determinants of Hospital Service Intensity for Maternity Wards in California," HEW	\$130,332
	Proposal submitted: "Implications of Existing and Proposed Federal Energy Regulatory Systems for California, State of California Energy Resources Conservation and Development Commission	\$ 36,336
	Proposal submitted: "Birth Weight, Gestational Age and Perinatal Mortality," HEW	\$ 87,355

# PROPOSALS SUBMITTED IN FISCAL YEAR 1974-75

1. An Urban Extension: Some Innovations

National Science

\$272,155

Project Director:
Perry Shapiro

3 years

Foundation

#### 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 supervisorial 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.

2. Training for Leadership: Fellowship Component Project Direction: M. Bruce Johnson Dean Mann Harold L. Votey, Jr.

Agency for International Development and Organization of American States \$695,997 \$338,492 (Not including indirect costs)

5 years

### ABSTRACT

We propose to initiate a training and research program involving the University, the OAS, and with OAS support, the University of the West Indies, to train people for decisionmaking at the middle management level of government. Our proposal is to adapt the key features of a very successful pilot program underway here, initially funded by the National Science Foundation, to train people for decisionmaking roles in local government. Our present program is operated by this institute jointly with the departments of economics and political science. The emphasis is a combination of rigorous training in the use of the tools of economics and scientific management and practical experience in the application of those tools.

The analytical techniques taught will include economic analysis of resource allocation problems, techniques for data collection and evaluation, public secto accounting, benefit-cost analysis, linear programming, input-output analysis, multiplier analysis and forecasting. Students will also study the problems associated with implementing policy within a particular political setting. The ultimate goal is to train students competent to analyze information in order to derive optimum policy for raising living standards and achieving other public goals.

A primary feature of our proposed program will be a period of independent investigation and analysis of some problems or set of problems typical of those the students can be expected to face in their home environment. We expect them to be able to deal capably with similar problems on their own initiative after completion of the training.

To strengthen the program both for faculty and students, an essential element will be a series of research projects dealing with problems faced by the countries from which students are drawn. Such research will cause the faculty to be more directly inovlved with some of the problems faced by the relevant countries. The research will also provide data and possibilities for direct involvement in research on the part of students in the program.

The training program will lead to an M.A. in economics. Entering trainees will be expected to have a B.A. or equivalent degree. The ideal trainee group

should be composed both of persons who have been involved with management and development problems and students who are fresh from academic training. An important aspect of our programs has been the effective way students have been taught to deal with problems on their own initiative. Students are encouraged to work independently of supervision and to take advantage of group talents, acting collectively to solve problems. The training process thus tends to be more effective the wider the backgrounds and experience of the students. Another important aspect of the recruitment process is that where possible there should be a positive link between recruitment and future employment. The greater the extent to which trainees, who leave for some position of responsibility, have some guarantee of returning, with opportunitites for advancement as they demonstrate their newly acquired talents, the greater will be the degree to which investment in the program will be certain to lead to the dissemination of the benefits of the training in the countries where these benefits are most needed.

Our goal is two-fold. First, we propose to provide trainees who will be competent in dealing with some of the analytical problems creating development bottlenecks in their countries of origin. Second, we propose to develop a program for transferring our capabilities at training of this nature to universities in the developing countries so that they can effectively train students for decisionmaking in their own countries. Once they have developed faculty with the appropriate capabilities for work of this nature, a greater proportion of the work experience for the trainees can take the form of internships (as is done with our NSF funded program) rather than the initially lower cost workshop program. We envision a long and continuing period of interaction so that new developments in subject matter as well as training techniques can be transferred easily from the University of California to the cooperating universities in OAS countries. Initially, such interaction will be with the University of the West Indies.

The program as proposed will run for five years, at the end of which time it will be evaluated by the University to determine whether or not it should be adopted as part of the University's regular programs.

3. Regulation of Insurance: A Theoretical and Empirical Study

National Science Foundation

\$154,293

2 years

Principal Investigators:
H. E. Frech
Jack Hershleifer (UCLA)
John Marshall

#### ABSTRACT

While the insurance industry is large and highly regulated, very little is known about the effects of its regulation from either a theoretical or empirical viewpoint. Acquiring knowledge about those effects is especially important since insurance regulation is now in a state of flux. Several states have recently deregulated various kinds of insurance, while proposed national health insurance plans will probably add new regulations. We propose to provide some of the needed knowledge with a two-pronged research effort.

First, on the theoretical level, we will build on the previous work of one of the investigators (Marshall, 1969, 1974a,b,c,d), and apply the modern theory of exchange in contingent claims developed largely by Arrow. Specifically, we will investigate the following problems for insurance regulation: moral hazard (inappropriate incentives for loss prevention caused by insurance), market stratification (sorting risks into appropriate risk classes) and the regulation of the design of insurance contracts.

Second, on the empirical side, we plan to investigate the impact of regulation on two important classes of insurance; health insurance and property-liability insurance. The health insurance study, extending the work of the principle investigator (Frech, 1974b,c, 1975) will trace the effects of several dimensions of regulation. We will examine measures of industry structure, quantity and coverage of insurance provided by the industry and the ultimate effect of regulation on the price and quantity of medical care.

The property-liability study will focus on a model of nonprice competition in the industry. We will measure the effects of regulation, especially regulation of prices or rates, on industry organization, the supply of services complimentary to insurance, insurer profits and solvency.

Both empirical studies will exploit the variation of regulation across states and across time. Pooled time series and cross section methods will be used.

The results will be important for state regulators and federal policy makers, especially those designing national health insurance plans.

4. The Dynamics of the Housing Market

HUD

.\$9,696

Principal Investigator: William C. Lee, Ph.D. Candidate

1 year

#### ABSTRACT

This proposed dissertation will produce a description of the operation of the housing market. The research is aimed at determining whether one diffuse housing market exists interacting with interrelated submarkets, or if the housing market is composed of many autonomous mini-markets.

In order to produce effective housing policies, the forces acting on and throughout the housing market must be understood by public policy planners. This investigation will aid these agencies in spending tax monies more effectively and efficiently.

5. Managing California's Energy Resources: An Institutional Analysis

\$69,388

State Energy Resources Conservation and Development Commission

Principal Investigators:

1 year

- D. E. Mann
- J. E. Moore
- A. J. Wyner
- W. J. Mead

# ABSTRACT

The people of the State of California, through the enactment of the Warren-Alquist State Energy Resources Conservation and Development Act in 1974, have recognized the necessity of ensuring a reliable supply of energy while at the same time protecting the quality of the environment. Pursuant to these objectives, the State Energy Resources Conservation and Development Commission (SERCDC) has been given a broad mandate for research and development, planning, regulation, and information exchange with local, state and Federal agencies.

The thrust of our research effort will be to assess the political and institutional resources and constraints affecting the capacity of the SERCDC to carry out the critical function of conflict reconciliation, to explore alternative means of performing this function, and to appraise the prospects for implementing a successful energy management program on the foundation supplied by the Warren-Alquist Act.

6. Intrauterine Growth and Neonatal Risk in California

\$6,392

State of California Department of Health

Principal Investigator:

4 months

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 analyzed 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.

(This proposal has just been funded.)

7. Identification of the Determinants of Hospital Service Intensity for Maternity Wards in California

\$130,332

Principal Investigator:

Ronald L. Williams

Department of Health, Education and Welfare Health Resources Admin.

18 months

#### ABSTRACT

This contract proposes to investigate the determinants of service intensity within a specialized sector of the medical care process. First, it will study hospital care on a cross-sectional basis using a sample of approximately 400 hospitals in California during the period 1965 to 1972. Secondly, it will study a specific tracer, i.e. the case of parturition and the care of the newborn during the perinatal period. Choosing this particular approach will make possible the accurate measurement of hospital output based on end-product measures and will provide an extremely detailed description of the structure of inputs within a milieu where inputs are uniquely associated with output. Thus it is expected that accurate measurements of service intensity will be possible for a large sample of hospitals having known characteristics. By merging several sources of data, hospital, patient, and physician characteristics will also be identified by hospital.

8. Implications of Existing and Proposed Federal Energy Regulatory Systems for California

\$36,336

Principal Investigators: Walter J. Mead H. E. Frech J. E. Moore Energy Resources Conservation and Development Commission, State of California

9 months

# ABSTRACT

The objectives of this study are to (1) identify the principal types of existing and proposed energy related federal regulations that affect California, (2) analyze their probable economic impact on California, and (3) identify and evaluate specific policy options which might be considered by the State Energy Commission. Federal energy policies to be studied include the following: (1) Existing Federal Power Commission control over the field price of interstate natural gas, end use controls over natural gas, and the proposed extension of FPC price controls to include intra-state gas. (2) Existing Federal Energy Administration controls over crude oil and product prices, crude oil allocations, crude oil entitlements, and the proposed end use controls over crude oil and products. (3) Import quotas on crude oil and products, both the past record and proposed new quotas. (4) Tariffs on crude oil and products, both the past record and proposed new tariffs. Additional federal policies may be added in consultation with the Energy Commission.

9. Birth Weight, Gestational Age and Perinatal Mortality

\$87,355

Principal Investigator: Ronald L. Williams

National Institute of Health

18 months

#### ABSTRACT

The major objective is to perform a rigorous statistical analysis of the accumulated California linked vital records for the years 1966 through 1972. Each of at least 2,365,217 matched birth-death records stored on computer tape will be examined and information gathered on birth weight, gestational age, and perinatal mortality. Other important variables such as race, sex, and plurality will also be abstracted from each record. The resultant information will be used to calculate accurate reference standards for intrauterine growth and perinatal viability by race, sex, and plurality. Both conventional, i.e. gestational age-specific birth weight percentiles, and bivariate graphical displays will be constructed. The results will be disseminated to practicing clinicians in California for use in decision-making related to the medical treatment of high-risk newborns.

#### EXTRAMURAL GRANTS AND PROJECTS

1. AN URBAN EXTENSION: A Proposal for a Broad Based Program
Providing Training and Research for the Solution of Urban Problems

November 1, 1972 through April 30, 1975 National Science Foundation, NSF GZ2637

Funds granted: \$75,000

#### Faculty:

Perry Shapiro, Department of Economics
M. Bruce Johnson, Department of Economics
Harold L. Votey, Jr., Department of Economics
W. Douglas Morgan, Department of Economics
Robert Deacon, Department of Economics
Vinod Agarwal, Lecturer

#### Students:

Richard Young, Research Associate C.R. Perelli-Minetti, Research Assistant

#### ABSTRACT

This program is designed to develop a prototype model of an Urban Extension Service patterned after the existing Agricultural Extension Service. Its aim is to discover and implement improved solutions to urban problems. The attack is two pronged: A program of research in response to problems of the local public sector, coordinated with a training program designed to prepare students at the graduate level for decision making and administration in connection with urban problems.

In the Fall of 1972, the Department of Economics at UCSB instituted a Masters Degree in Urban Economics as a prototypical model for the Urban Extension. Its goal is to provide a short intensive course in tools useful to an urban planner. The requirements for the degree are three quarters (nine months) of academic training and six months of supervised intern training in positions in state or local public service activities where experience will be relevant to prior training and career goals. A final quarter of oncampus training will be used to relate field training to academic study.

The training program itself, which was initiated in response to the needs of local public agencies, as well as the work of graduates of the program, has served to raise the level of technological expertise in the urban public sector.

#### COMMENT

This project is in its last year. Results have been impressive from the point of view both in terms of student success in finding employment on award of the M.A. Degree and in terms of community acceptance of interns. The results have been so impressive that NSF is likely going to award a much larger grant of approximately \$270,000 over a three year period, to expand our present activities.

2. PERINATAL MORTALITY AND HEALTH SERVICES PRODUCTIVITY
September 1, 1973 to August 31, 1974 Funds granted: \$22,236
National Institute of Health - HSO1036-01/02

Faculty:

Llad Phillips, Department of Economics Ronald L. Williams, Associate Specialist

#### ABSTRACT

The major objective of this study is to develop a measure of real medical care output and to apply it in a productivity analysis of health service delivery systems. Empirical results and data acquired in completing the major objective will also be used to help separate the causes of the relatively high perinatal mortality rates among nonwhites and those in lower socioeconomic classes, and to explore the implications of economic analysis in comprehensive health planning.

#### COMMENT

This project has been completed and the final report has been submitted to the National Institute of Health. During a personal visit to Washington, D.C. in March, 1975, Dr. Williams met with Marsha Goldfard, Ph.D., the project monitoring officer at DHEW forthis grant. Dr. Goldfard stated that the Final Report had been very favorably received at HSMHA, and further suggested that the quality of the work would have significant bearing on any future research grant proposals that the Institute might submit to DHEW.

Two publications have resulted from this project:

- 1) "Explaining a Health Care Paradox," Policy Sciences 6:91-101, 1975
- 2) "Intrauterine Growth Curves: Intra- and International Comparisons with Different Ethnic Groups in California," <u>Preventive Medicine</u>, in press, 1975.

From the number of reprints requested, "Explaining a Health Care Paradox" has received wide acceptance among health service researchers. By correspondence with such research, a number of whom are also affiliated with university-based research institutes, it will not only be possible to acquaint others with the capabilities of the Institute, but also establish avenues of communication that will result in broadening the Institute's horizons.

3. CYCLES IN FERTILITY, MORTALITY AND ECONOMIC CONDITIONS

June 1, 1974 to May 31, 1976 Funds granted: \$51,318

National Institute of Health - HD05985/01

Faculty:
Llad Phillips, Department of Economics
Harold L. Votey, Jr., Department of Economics
Students:
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.

#### 4 MINIMIZING THE SOCIAL COST OF DRUNKEN DRIVING

Ford Foundation - 740-0596

Funds granted: \$75,000

August 1, 1974 to July 31, 1975

Faculty:

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

Specialists:

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 wester European countries, (2) to compare and contrast European methods and effectiveness with the American experience, and (3) to indicate the control options available to policymakers given the degree to which they are constrained by culturally determined attitude 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 consis 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 the 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.

# 5. MINIMIZING THE SOCIAL COST OF DRUNKEN DRIVING

National Institute of Mental Health 1 RO1 AA01432-01

Funds granted: \$36,343

(First year)

November 1, 1974 to October 31, 1976

#### ABSTRACT

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

#### COMMENT

Professors Phillips and Votey are now in London carrying out this research.

#### 6. PROJECT FOR RESEARCH IN STUDENT LEARNING

June 27, 1973 to August 31, 1975

Funds granted: \$39,775

National Institute of Education - NE-G-00-3-0128

Faculty:

Donald R. Winkler, Department of Economics

Students:

Charles Judd, Typist Clerk Cathy Kasala, Statistical Clerk Ronald Lafferty, Research Assistant Vefa Tarhan, Research Assistant Janet Wolfman, Typist Clerk

#### 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 (i) the impact of the school environment over time, (ii) the locational choices of teachers, and (iii) 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 all utilize the same body of data and assume the same general model of learning.

The emphasis of the proposed research lies with the first hypothesis. Using longitudinal data on student observations, we shall estimate the time pattern of school resource effectiveness; in other words, we shall attempt to determine where in the student's school life additional resources would have the greatest impact in terms of some final achievement score. The question will be tackled using two alternative models: (i) a distributed lag model and (ii) a control model. The results of the analysis may have important policy implications with respect to how schools should allocate resources between different grade levels; the implications are especially important for compensatory education programs.

# 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 school-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 not yet completed. It is an analysis of how pupil attitudes towards the future are

Funds granted: \$37,485

7. DIVORCE: AN ECONOMIC APPROACH

May 1, 1975 to April 30, 1977

National Institute of Health - HD09076/01

Faculty:

M. Bruce Johnson, Department of Economics Michael Ward, Department of Economics

Students:

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 pooled 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 socio-economic variables and marital instability.

#### COMMENT

Funds for this project have just been received and research will be getting underway during the summer months.

8. UNIVERSITY REQUIREMENTS AND RESOURCE ALLOCATION IN THE DETERMINATION OF UNDERGRADUATE ACHIEVEMENT

July 1, 1973 to September 15, 1974

Funds granted: \$9,988

National Institute of Education - NE-G-00-3-0151

Faculty:

Robert H. McGuckin, Department of Economics Donald R. Winkler, Department of Economics

Students:

Alex Bocast, Assistant Cathy Kasala, Statistical Clerk Karl Liu, Typist Clerk

#### ABSTRACT

This study considers the impact of university services and required "breadth" requirements on the education achievement of undergraduate students. We view university education as a production process which translates student and university inputs into an increase in the undergraduate's stock of human capital as measured by GRE scores, weighted grade point averages, and dropout rates. Particular attention is focused on the production of university services as well as their productivity in the educational process.

Our model for educational attainment is estimated by use of disaggregated data on individual students. Course patterns and costs are based on individual department data from the University of California at Santa Barbara. This data base enables us to develop precise estimates of the university services consumed by each student. It also allows us to eliminate several methodological problems in existing studies through the use of separate estimates of each department's contribution to the students consumption of university services.

Considering the vast resources that are spent on higher education it is imperative that we generate precise estimates of the effects of these resources on the educational process. Efficient allocation of public funds among educational institutions requires information on both the productivity of and costs of educational services. This study seeks to provide answers to both these questions with respect to higher education:

#### COMMENT

In their study, McGuckin and Winkler found that the presence or absence of course requirements in higher education had no significant effect on grade point average of students but did affect dropout rates slightly. Students who were not required to take the general education courses of the college were less likely to drop out.

#### PUBLICATIONS

#### I. A. Papers

- Ronald L. Williams, "Explaining a Health Care Paradox," Policy Sciences 6:91-101, 1975.
- 2. Ronald L. Williams, "Intrauterine Growth Curves: Intraand International Comparisons with Different Ethnic Groups in California," Preventive Medicine, in press, 1975.
- 3. Donald R. Winkler, "The Policy Implications of Research in Educational Production," forthcoming in J. McDermott (ed.), Social Science and Educational Policy, McCutchan Publishing.

#### B. Papers Under Editorial Review

- 1. Ronald L. Williams, "An Analysis of Birth Weight, Gestational Age, and Neonatal Loss: Based on 1,424,637 Linked Records in California."
- 2. Ronald L. Williams, "A Comparison of Intrauterine Growth Curves for Chinese Born in Taiwan and in California."
- 3. Donald R. Winkler, "Educational Production and the Distribution of Teacher Time."
- 4. Donald R. Winkler, "The Production of Human Capital Over Time."
- 5. Donald R. Winkler, "The Revealed Preferences of a Local Government Bureaucracy."

#### II. Reports

- 1. Ronald L. Williams, "Final Report: Perinatal Mortality and Health Services Productivity," Research Grant HS01036-01/02 from the Bureau of Health Service Research and Evaluation.
- 2. Donald R. Winkler, "Final Report: University Requirements and Resource Allocation in the Determination of Undergraduate Achievement."

### Intern Project Reports

- Carl Branstrom, "The Cost of Public Inebriates: Jail vs. Detoxification."
- Jacqueline Cattani, "Examples of Constraints to the Economics Approach of Policy Analysis at the Federal
- Daniel Drazich, "Effects of SB90 on County Government Expenditures."
- Mary Jones, "A Workbook on Local Revenue Estimation."
- Conrad Langille, "Effect of Government Regulations on Milk Prices: Case of Nevada."
- Richard P. Fajardo, "A Capital Improvement Program Manual."
- Robert Leiter, "Fiscal Effects of Residential Growth."
- Marco Lizarraga, "Regional Population Projection Model." Sanford Miller, "Cost-Revenue Study on Selected Sites, i. Santa Barbara, California."
- Richard Osaki, "Economic Analysis of the City of Fresno."
- Granville Pool, "A Critique of Urban Impact Methodologies."
- Benjamin Smith, "Computer Assisted Assessment: Some Extensions."
- Robert Wolfe, "Cost-Revenue Study of Selected Development in the City of Ojai."

# III. Papers Presented at Conferences

- Donald R. Winkler, "A Study of the Social Demand for Graduate Education," Conference on Graduate Education--Manpower and Costs, University of Illinois, July 1974.
- Donald R. Winkler, "The Policy Implications of Research in Educational Production," Childhood and Government Conference, Windsor, England, June 1974.
- Donald R. Winkler, "Time and Learning: An Economic Analysis," American Educational Research Association, April 1975.

# OTHER ACADEMIC PROJECTS

# 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 the Community and Organization Research Institute.

See Appendix C

# FISCAL SUMMARY

	U.C. Core Budget	Extramural Fu	unds-Expendit	ures
Sub-0	\$11,020	Süb-0	\$	
Sub-1	4,632	Sub-1	. *	
Sub-2	375	Sub-2	82,627	
Sub-3	1,019	Sub-3	5,164	
Sub-4		Sub-4		
Sub-5		Sub-5	24,731	
TOTAL	\$17,046	TOTAL	\$112,522	thru 5/31/75
		Projection to 6/30/75	\$118,847	

		6/30/7	5	\$118,847		
	STATISTICAL	SUMMAE	RY			
1a)	UCSB academic staff engaged i	n resea	rch and	training:		
	<ul><li>a) Faculty</li><li>b) Professional Researchers</li><li>c) Specialists</li></ul>	13 1 2	e) G	ostdoctoral raduates ndergraduates	49 5	
15)	Participation from other comp			See Appen	TOTAL:	70
1b)	Participation from other camp  a) Faculty b) Students	2 1		See Appen	TOTAL:	3
2)	Number of employees in unit:				•	
	<ul><li>a) On University funds:</li><li>b) On Non-University funds:</li></ul>	3 28			TOTAL:	31
3)	FTE: Univer	sity	Non-Uni	versity		
	<ul><li>a) Professional .40</li><li>b) Technical</li><li>c) Administrative</li></ul>	)	4.2 2.2 .5	2		
•	d) Clerical .62	28	.7	30 See Appen	TOTAL: dix B	8.77
4)	Number of publications: (See	p.19	of Sect	Lon A)	TOTAL:	26
5)	Number of proposals submitted	: (See	pp.5-10	)) Section A).	.TOTAL:	9
6)	Amount of space currently occ	upied:		TOTAL	UNITS:	7

# COMMUNITY AND ORGANIZATION RESEARCH INSTITUTE

#### APPENDIX A

# UCSB ACADEMIC STAFF ENGAGED IN RESEARCH AND TRAINING AND/OR PROPOSED RESEARCH

#### I. PROJECTS IN PROGRESS

- A. Urban Extension Internship Training Program (NSF)
  - 1. Faculty
    - a. Perry Shapiro, Assoc. Prof., Economic, Director
    - b. Lloyd Mercer, Assoc. Prof., Economics. Chairman, Department of Economics
    - c. Harold L. Votey, Jr., Assoc. Prof., Economics, Steering Committee
    - d. Alan Wyner, Asst. Prof., Political Science, Steering Committee
    - e. Robert Deacon, Asst. Prof., Economics, Steering Committee
    - f. W. Douglas Morgan, Assoc. Prof., Economics, Intern Program Director
    - g. Donald Winkler, Asst. Prof., Economics, Steering Committee
    - h. Vinod Agarwal, Lecturer, Economics
  - 2. Graduate Students

### Second Cohort

- a. Carl Branstrom
- b. Jacqueline Cattani
- c. Daniel Drazich
- d. Richard Fajardo
- e. Mary Jones
- f. Conrad Langille
- g. Robert Leiter
- h. Marco Lizarraga
- i. Sanford Miller
- j. Richard Osaki
- k. Granville Pool
- 1. Benjamin Smith
- m. Robert Wolfe

# Full Time Program

#### Third Cohort

- a. David Branchcomb
- b. John Dimperio
- c. Jack Jenkins-Stark
- d. Darrell Joyner
- e. Edward Kleeman
- f. Richard Liebermann
- g. Dennia Muroaka
- h. Carl Perelli-Minetti
- i. Jonathan Smolen
- j. Gary Toeller
- k. Mark Wilkins

### Extended Degree Program

- 20 Students enrolled in Training Program
- B. Perinatal Mortality and Health Services Productivity Faculty:
  - a. Llad Phillips, Assoc. Prof., Economics
  - b. Ronald L. Williams, Asst. Research Economist

- C. Cycles in Fertility, Mortality and Economics Conditions
  - 1. Faculty
    - a. Llad Phillips, Assoc. Prof., Economics
    - b. Harold L. Votey, Jr., Assoc. Prof., Economics
  - 2. Students

Stephen Haynes, Research Assistant

- D. Minimizing the Social Costs of Drunken Driving
  - 1. Faculty
    - a. Donald Cressey, Prof., Sociology
    - b. Peter Merkl, Prof., Political Science
    - c. Jack Douglas UCSD, Prof., Sociology
    - d. Llad Phillips, Assoc. Prof., Economics
    - e. Harold L. Votey, Jr., Assoc. Prof., Economics
    - f. Daniel Gregory, Lecturer
- E. Project for Research in Student Learning
  - 1. Faculty
    Donald R. Winkler, Asst. Prof., Economics
  - 2. Students
    - a. Charles Judd, Typist Clerk
    - b. Cathy Kasala, Statistical Clerk
    - .c. Ronald Lafferty, Research Assistant
    - d. Vefa Tarhan, Research Assistant
    - e. Janet Wolfman, Typist Clerk
- F. Divorce: An Economic Approach
  - 1. Faculty
    - a. M. Bruce Johnson, Prof., Economics
    - b. Michael Ward, Act. Asst. Prof., Economics
  - 2. Students
    - a. Michael Nakada, Research Assistant
- G. University Requirement and Resource Allocation in Determination of Undergraduate Achievement
  - 1. Faculty
    - a. Robert McGuckin, Asst. Prof., Economics
    - b. Donald Winkler, Asst. Prof., Economics
  - 2. Students
    - a. Alex Bocast, Typist Clerk
    - b. Cathy Kasala, Statistical Clerk
    - c. Karl Liu, Typist Clerk

# II. PARTICIPATION FROM OTHER CAMPUSES

- A. Project for Research in Student Learning
  - 1. Faculty

Joseph Ritzen, Lecturer, Economics, UCB, Co-principal Investigator with Donald Winkler, UCSB, over the life of the project.

2. Students

One computer programmer

- B. Minimizing the Social Cost of Drunken Driving
  - 1. Faculty

Jack C. Douglas, Professor, Sociology, UCSD, Co-principal Investigator with Professors Phillips, Merkl and Votey, UCSB, over the life of the project.

# III. PROJECTS PROPOSED

- A. An Urban Extension: Some Innovations
  - 1. Faculty

#### Economics

- a. Robert Deacon, Asst. Prof.
- b. M. Bruce Johnson, Prof.
- c. John M. Marshall, Asst. Prof.
- d. Walter Mead, Prof.
- e. W. Douglas Morgan, Assoc. Prof.
- f. Llad Phillips, Assoc. Prof.
- g. Perry Shapiro, Assoc. Prof.
- h. Harold L. Votey, Jr., Assoc. Prof.
- i. Donald Winkler, Asst. Prof.
- B. Training for Progress
  - 1. Faculty

#### Economics

- a. Robert Deacon, Asst. Prof.
- b. John Marshall, Asst. Prof.
- c. Robert McGuckin, Asst. Prof.
- d. W. Douglas Morgan, Assoc. Prof.
- e. John Pippenger, Assoc. Prof.
- f. Perry Shapiro, Assoc. Prof.
- g. Harold L. Votey, Jr., Assoc. Prof.
- h. Donald R. Winkler, Asst. Prof.

# Political Science Dean Mann, Prof.

a.

- b. John Moore, Assoc. Prof.
- c. Alan Wyner, Asst. Prof.

- Political Science
- a. Wolfram Hanrieder, Prof.
- b. Dean Mann, Prof.
- c. Peter Merkl, Prof.
- d. John Moore, Assoc. Prof.
- e. Jorge Nef, Lecturer
- f. Charles Ornelas, Asst. Prof.
- g. Alan Wyner, Asst. Prof.

- C. Regulation of Insurance: A Theoretical and Empirical Study
  - 1. Faculty
    - a. H. E. Frech, III, Asst. Professor, Economics
    - b. Jack Hirshleifer (UCLA), Professor, Economics
    - c. John Marshall, Asst. Professor, Economics
  - 2. Students
    Joseph Samprone, Ph.D. Candidate, Economics
- D. The Dynamics of the Housing Market
  William Lee, Ph.D. Candidate, Economics
- E. Managing Californ's Energy Resources: An Institutional Analysis
  - 1. Faculty
    - a. D. E. Mann, Professor, Political Science
    - b. W. Mead, Professor, Economics
    - c. J. E. Moore, Assoc. Prof., Political Science
    - d. A. J. Wyner, Asst. Prof., Political Science
- F. Implication of Existing and Proposed Federal Energy Regulatory Systems for California
  - 1. Faculty
    - a. H. E. Frech, III, Asst. Prof., Economics
    - b. J. E. Moore, Assoc. Prof., Political Science
    - c. Walter J. Mead, Prof., Economics
- G. Intrauterine Growth and Neonatal Risk in California Ronald L. Williams, Assistant Research Economist
- H. Identification of the Determinants of Hospital Service Intensity for Maternity Wards in California

Ronald L. Williams, Assistant Research Economist

I. Birth Weight, Gestational Age and Perinatal Morality Ronald L. Williams, Assistant Research Economist

# APPENDIX B

# FTE ASSIGNED TO THE INSTITUTE

		Name	<u>Title</u>	FTE
I.	PRO	OFESSIONAL		
•	Α.	Academic Year		
		/		
		<ol> <li>Harold L. Votey, Jr.</li> </ol>	Principal Investigator	.67
		2. Llad Phillips	Principal Investigator	.67
		<ol><li>Peter Merkl</li></ol>	Principal Investigator	33
				1.67
	В.	Eleven Month Appointment		
	•	1 D 11 T 17/11/	Co-Principal Investigator	.09
		1. Ronald L. Williams	Co-Principal Investigator	.09
		2. Daniel P. Gregory	Asst. Specialist	
		3. Dieter Raabe	ASSC. Specialist	<u>.55</u> .73
	C.	Summer $1974 (2/9 = 1.00)$		
		1 Hereld I Votov Ir	Principal Investigator	1.25
		1. Harold L. Votey, Jr.	Principal Investigator	1.25
		<ol> <li>Llad Phillips</li> <li>Donald R. Winkler</li> </ol>	Principal Investigator	1.25
		4. Robert McGuckin	Principal Investigator	.25
			Principal Investigator	.50
		5. Donald Cressey	TIMOIPUI INVOCULO	4.50
		•		
	D.	Summer 1975 (to end of fiscal	year, $2/9 = 1.00$ )	•
		1. M. Bruce Johnson	Principal Investigator	.25
		2. Michael Ward	Co-Principal Investigator	.25
		3. Peter Merkl	Principal Investigator	.25
		4. Jack D. Douglas	Principal Investigator	.25
		4. Jack D. Douglas	T Limit par an All and a limit part and	1.00
II.		ECHNICAL		
	Α.	Academic Year		
		1. Vefa Tarhan	Research Assistant	.06
		2. Stephan Haynes	Research Assistant	.18
		3. Richard Young	Research Associate	.44
	-	4. Carl Perelli-Minetti	Research Assistant	.06
		5. Cathy Kasala	Statistical Clerk	.45
		6. Catherine Votey	Assistant	.30
		7. Carolann Phillips	Assistant	.32
		8. Ronald Lafferty	Research Assistant	.02
		9. Michael Nakada	Research Assistant	.02
•		y. Hichael Makada		1.85

	В.	Summer $(2/9 =$	1.00)		•			
			,					•
		1. Vefa Tarha	ın	Resear	ch Assistant			.75
		2. Stephen Ha	iynes	Resear	ch Assistant			37
								1.12
III.	ADN	MINISTRATIVE						
	Α.	Academic Year						
,	*	1. Perry Shap	1 ma	A - +	D			
		2. M. Bruce J			Director Director			.20 .20
		z. II. bluce b	omson	ACCING	DITECTOL			.40
	В.	$\underline{\text{Summer}} (2/9 =$	1.00)					•40
		1. Perry Shap	iro	Direct	or, Urban Tr	aining Pi	rogram	1.00
		2. Robert Dea			Supervisor			.50
		3. W. Douglas	Morgan		Supervisor			1.75
							•	1.75
IV.	CLE	RICAL						
	1.	Barbara Hagen		Secreta	ary, Institut	te		.50
			•	Secreta	ary, Urban Ti		rogram	.50
		Elizabeth Mend	ly .	Typist				.052
	3.	David Fourney		11	11			.021
		Denise May		· 11	17			.10
	5.	Janet Wolfman Karl Liu		17	 11			.053
		Linda Cheslow		11	11			.033
	8.	Charles Judd		11	11			.037
	••	· ·						$\frac{.042}{1.358}$
•								
	SUM	MARY						
	Aca	demic Year Appoi	intments					
	I.	Professional			1.67			
1		Technical			1.85			
II	II.	Administrative			40			
			•		3.92			
	C	(2/0 1 00	22 : 4					
	Sum		x .33, i.e. weigh cegular year)	rea ·				
	I.	Professional			1.81			
			$1.12 \times .33$		•37			
		Administrative			.58			
		· · · · · · · · · · · · · · · · · · ·		*	2.76			
•			•					
	Full	L Year Appointme	ents		•			
		Professional			.73			
I	I.	Clerical			$\frac{1.36}{2.00}$			
					2.09			
			WEIGHTED TOTAL	FTE	8.77			

#### APPENDIX C

#### CURRENT SPACE ASSIGNMENTS

Ellison Hall 3625B

Director: Harold L. Votey, Jr. Associate Director: Perry Shapiro

3625C

Secretary: Barbara Hagen

This space is nominally assigned to the Department of Economics and is a part of the sapee used primarily for the Urban 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 Training 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 occasional 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 NSF sponsored Urban Economics Program. Cathy Kasala shares the office, in the capacity of statistical clerk for Professor Winkler on his NIE grant.

Ellison Hall 5805

Dana Dumont has been assigned this space to conduct research for Professors Mercer and Morgan on a project being funded through the Water Resources Center, UC Davis. The work relates to the subject matter studied by interns in the Urban Program, thus this affiliation with the Institute ties in well with present ongoing activities.

North Hall 1013

This room is assigned to Professors Mercer and Morgan who are working on a research project funded by the Water Resources Center of UC Davis. Although the grant is not specifically administered by the Institute, the research is related to the type of extramural activity sponsored by the Institute. It is to the benefit of the Institute to assist in this sort of public service research. Professor Morgan is also using the office to administer the Urban Economics Program funded by the NSF grant, for which he is the Program Director.

North Hall 1015

This office space is occupied by Stephen Haynes, Research Assistant for Professors Phillips and Votey on their grant from the National Institute of Health, "Cycles in Fertility, Mortality and Economic Conditions."

North Hall 1017

Ronald L. Williams is an Assistant Research Economist with the Institute, and is carrying out his long term research in the evaluation of health care systems.