ICPSR Inter-university Consortium for Political and Social Research

Annual Report, 1964-1965

Inter-university Consortium for Political and Social Research

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Annual Report

1964-1965

Р.О. ВОХ 1248

ANN ARBOR, MICHIGAN 48106

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June, 1965

To:

The Council of the Inter-university Consortium for Political

Research

From:

The Executive Director of the SRC Staff to the Consortium

Subject: Third Annual Report, 1964-65:

I Summer Program

II Data Repository Activity

III Staff Composition

IV Budgets

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I. SUMMER PROGRAM

Discussion of Financial Support

Financial support for all phases of activity connected with the summer program has increased markedly. During the first two years the summer program was financed with sums of \$20,000-\$25,000, largely from the operating budget. The total support for 1965 will be well over \$100,000, including both direct and indirect costs. Of this total, three grants from the National Science Foundation contribute slightly more than \$75,000. The University of Michigan, through its support of teaching staff as well as computer and administrative costs, will contribute approximately \$32,000. The Social Science Research Council will make an effective contribution of approximately \$5,000 to cover seminar leadership stipends. The remaining monies are provided by the Consortium operating budget. It is impossible to place a precise value on the latter sum because a major component of expense was incurred in preparing, ahead of normal schedule, data for use by participants in the summer program. These data, however, will all be added to the archives and the cost of their preparation, therefore, should not be laid entirely at the door of the summer program.

A preliminary review of expenditures indicates that approximately \$55,000 of the total will be used to subsidize participation in the program. Approximately \$20,000 will be absorbed in salaries paid to the twelve-man teaching staff. Another \$37,000 can be identified as direct administrative costs.

1965 Enrollment

Increased support for participation will apparently result in more than doubling enrollment. The largest increase is, of course, in the number of graduate students taking work for credit as a part of their graduate programs. The number of faculty members participating in the full eight weeks is approximately double that of the past two years but faculty participation will constitute a somewhat smaller proportion of the total participation than was true in the first two years of the summer program. Even though NSF financing made it appropriate to offer equal opportunity for support to applicants from non-Consortium schools, there has in fact been no appreciable increase in such participation. Another year, earlier action on proposals for support might make possible more national publicity for the program, and a larger contingent of non-member participants might result.

1963 Summer Program Attendance

	<u>687</u>	<u>787</u>	<u>781</u>	782	<u>524</u>	<u>583</u>	<u>584</u>	<u>684</u>	<u>687</u>
Credit	12	11	8	5	3			1	1
Visitor	6	4	6	5	8			3	7
Auditor	18	15	16	3	1	2	2		
Ph.D. Guest	<u>10</u>	6	<u>13</u>	11	_2	<u>2</u>	_		
	46	36	43	24	14	4	2	4	8
PS 687 PS 781 PS 787 PS 782 Soc 524 Soc 583 Soc 584 Soc 684 Soc 687	Seminar Seminar Seminar Computer Introduc Introduc Case Stu	in Comparation Quantition Research Application to Sution to Sution to Su	vioral Res ative Polit ative Poli ch on Judic ons in Sur arvey Resea arvey Resea sampling	second 4 second 4 second 4 second 4	weeks weeks	¢s			

ICPR

SRC

1964 Summer Program Attendance

	<u>687</u>	<u>787</u>	<u>781</u>	<u>782</u>	<u>524</u>	<u>583</u>	<u>584</u>	<u>585</u>	<u>687</u>	615
Credit	23	19	18	14	3	4	1	2	2	1
Auditor	19	16	22	17	3	2				1
Ph.D. Guest	_6	_8	<u>16</u>	_4	<u>1</u>	1		_	1	_
	48	43	56	35	7	7	1	2	3	2

	PS 687	Proseminar in Behavioral Research Methods
	PS 787	Seminar in Quantitative Political Analyses
ICPR	PS 781	Seminar in Legislative Behavior
	PS 782	Seminar in Political Research in Developing Countries
	Psych 524	Computer Applications in Survey Research
	Psych 583	Introduction to Survey Research I
	Psych 584	Introduction to Survey Research II
	Psych 585	Analysis of Survey Data
	Psych 615	Case Studies of Surveys in Organizations
	Psych 687	Methods of Survey Sampling

September 1, 1964

1965 Summer Program Attendance (as of June 1, 1965)

	<u>687</u>	<u>787</u>	<u>781</u>	<u>782</u>	<u>583</u>	<u>584</u>	615	617	<u>687</u>
Credit	55	54	12	8	11	2	1	7	4
Auditor	33	31	22	15	6	1	1	11	2
Ph.D. Guest	11	12	15	20	1			2	1
Visitor	2	_1	_3	9	-	_			-
	101	98	52	52	18	3	2	20	7

	PS 687) PS 787)	Research Design and Data Analysis
ICPR	PS 781 PS 782	Seminar on Theoretical Models for the Analysis of Community Power Structures Seminar on Methods of Historical Analysis
SRC	Psych 583 Psych 584 Psych 615 Psych 617 Psych 687	Introduction to Survey Research I Introduction to Survey Research II Case Studies of Surveys in Organizations Computer Applications in Survey Research Methods of Survey Sampling

Allocation of Subsidies

Despite a continuing growth in the number of member schools, a larger proportion of all members will be represented in the 1965 program than in earlier years. Only three schools who became members prior to July 1, 1965, will not have either student or faculty participation in this year's program.

As in past years allocations were made after serious consideration of the private or institutional resources otherwise available to prospective participants. This seemed appropriate in part because even the substantial increment in funds available was not sufficient to cover more than a major fraction of the total costs to be incurred by participants. It also seemed necessary to take into account the fact that the support provided by the National Science Foundation was made available on an ad hoc one-year basis and could not be construed as an assured substitute for individual and institution support in future years. Finally, the staff was guided in numerous marginal situations by the standing commitment to strive for equity among member institutions.

The summary data suggest that it is possible, if difficult, to realize some measure of equitable distribution of resources over a period of years. The four or five instances in which schools have markedly exceeded the averages are predominantly instances in which high transportation costs have necessitated larger grants. One major feature of the system of allocations is not reflected in any summary of disbursements: some schools that have received relatively larger sums have themselves made disproportionately greater efforts to locate financing for their own students and have thereby made it possible to support substantially larger than average numbers of participants. On the other side it should be noted that schools receiving relatively smaller allocations have in almost every instance received support for virtually all of their applicants. It seems reasonable to expect that in the future discrepancies among member schools will become less notable as the demand for summer training becomes more evenly distributed among the member institutions.

Plans for 1966

Realization of plans discussed last year will result in one major addition to the summer program in 1966. This would take the form of a second full eight-week sequence emphasizing work with aggregative data reflecting a substantial time dimension. The two seminar leaders being supported by the Social Science Research Council this summer (1965) are charged with assisting in the development of this sequence. The staff has explored additional sources of financial support and is reasonably optimistic about obtaining such support. We are also in contact with the Mathematics Social Science Board and its Committee on Mathematical and Statistical Methods in History. Cooperation with them in their efforts to provide training for historical research may help to define the Consortium's role in related endeavors.

Assuming a successful experience with the core of this year's summer program we will doubtless seek a renewal of the support provided by the National Science Foundation. Although we have neither informal nor formal indications that such support would be forthcoming, it seems reasonable to assume that a strong case could be made. If these expectations prove ill-founded we will of course extend our efforts to locate comparable support from some other quarter.

Content foci for the special seminars for 1966 are as yet unspecified. A number of areas have been suggested to the staff, including the study of state legislatures, the study of political party organization, and the study of voting behavior in the United Nations General Assembly. Inasmuch as support for these seminars must be sought early in the next fiscal year, recommendations should be submitted promptly to staff or Council members.

Two persistent matters of policy must be given continuous review: 1) How large should the summer program be; should efforts be made to secure support that would allow further increase in the number of participants and commensurate increase in the staff?

2) How elaborate or diversified should the program be; are there evolving specifications of the curricular lacunae the program is expected to fill; what formal training role should the Consortium attempt to define for its program.

II. DATA REPOSITORY

PROSPECTUS FOR CONSORTIUM DEVELOPMENT

At the end of its third year of operation, the Inter-university Consortium for Political Research must choose between limiting or expanding the scope of its activities. The less ambitious alternative of sustaining an established program at its present level would still permit the organization to redeem many of the expectations that led to its creation and to fulfill a good part of its commitments to the member institutions and the several hundred participating scholars. A decision not to expand would, however, ignore both internal and environmental changes of the past three years. It would also reject, at least temporarily, a challenging opportunity to augment the nation's resources for basic and applied research in the social sciences. The Consortium staff and Council are agreed that every effort should be made to realize the potential that is felt to exist in an expanded program of activities.

The Growth of the Consortium

The Consortium was created to make the manifold resources of a major research organization completely available to individuals located at other institutions. During the decade of the 1950's, the Political Behavior Program of the University of Michigan's Survey Research Center had inadvertently acquired something approaching a monopoly of survey data pertaining to American national elections. The rich accumulation of data and the well-established summer training program of the Survey Research Center were complementary attractions for many scholars. With the sponsorship and support of the Social Science Research Council, summer institutes for the study of political behavior were held at the Center in 1954 and 1958. Many more researchers on their own initiative sought data as well as professional and technical assistance from the Center; some, such as the late Professor V. O. Key, Jr., spent more or

less extended periods of time in residence in Ann Arbor. The first institutionalized arrangement for visiting scholars was provided by the Yale University Department of Political Science through the establishment of annual summer "SRC Fellowships" for their own advanced graduate students. However, despite the success of several such individual arrangements, the Survey Research Center remained limited in its financial ability to encourage utilization of its resources.

With the crucial assistance of a grant from the Stern Family Fund, the Consortium came into being in 1962 with some eighteen universities making up the charter membership. In every instance membership was initiated by a department of political science or government on behalf of its staff members and graduate students. In almost every case, the interested individuals were specialists in American politics or American national government. At the same time, there was nothing in the letter or spirit of the organizational principles that dictated a narrow subdisciplinary base for the organization; the impetus for affiliation was simply provided by those who had become rather uniquely aware of the opportunities membership would afford for their own research and graduate The subsequent diffusion of information about the Consortium was accompanied by a swift increase in the number of schools and individuals associated with the organization. The second year's operation began with some thirty-one universities as members and the number has risen to fifty in the course of the third year. 1

However gratifying such an increase in sheer numbers may be, the more significant dimension of growth concerns the substantive interests of the participants. The broadly phrased charter of the Consortium deliberately avoids any definition of what are legitimate substantive interests for participants. In developing a capacity to respond to the

Allegheny College; University of Arizona; Ball State University; University of British Columbia; University of California, Berkeley; University of California, Los Angeles; University of Chicago; Columbia University; Cornell University; DATUM (Bad Godesberg, Germany); Duke University; University of Florida; Florida State University; Georgetown University; University of Georgia; University of Illinois; Indiana University; University of Iowa; University of Kansas; University of Kentucky; University of Maryland; University of Michigan; Michigan State University; University of Minnesota; University of Missouri; S.U.N.Y. Graduate School of Public Affairs; State University of New York at Buffalo; New York University; University of North Carolina; Northwestern University; Ohio State University; University of Oregon; University of Pennsylvania; Pennsylvania State University; University of Pittsburgh; Princeton University; Queen's University; University of Rochester; Southern Illinois University; Stanford University; University of Strathclyde; Syracuse University; Temple University; University of Tennessee; Vanderbilt University; University of Washington; Washington University; Wayne State University; University of Wisconsin; Yale University.

needs of the initial cadre of participants, the Consortium has avoided delimiting the disciplinary scope of Consortium activities.

In the beginning, participant interest was focused on access to survey data and on training in the use of such data. At the same time, staff and Council were persuaded that the future of social research was necessarily bound up in the integrated use of the variety of resources available to the researcher, including the integrated use of very different kinds of data. This conviction supported an early concern over problems of method and substance that reach well beyond survey data and into fields of interest other than American national elections. Nevertheless, the bulk of organizational activity during the first two years was directed to sharing the Center's survey data and its presumed expertise in the analysis of such data.

More recently, however, the sheer existence of the Consortium as a jointly supported association of universities committed to facilitating individual scholarship and research in the general field of politics and government, has prompted further developments. The most notable of these was the creation of the American Historical Association's ad hoc committee "to collect the basic quantitative data of American political history," under the chairmanship of Professor Lee Benson of the University of Pennsylvania. With the endorsement of the American Council of Learned Societies, the AHA Committee joined forces with the Consortium to provide a major addition of aggregated election returns to the established repository of survey data. collection and processing of this massive set of heretofore scattered data (complete county returns for President, Congress, and major state offices, for the entire nation, from 1824 to the present) marks the culmination of an extended effort initiated by an informal group of historians and political scientists and supported by the Social Science Research Council through a series of grants to Professor Walter Dean Burnham, now of Haverford College. As soon as the unique role which the Consortium could play in carrying out such a major project became clear, plans were laid for a complementary collection of core data on the social and economic characteristics of the population which could be extracted from published U. S. Census material.

Even apart from the growing commitment to support research based on aggregate data in great historical depth, the increase in membership brought with it a diversification of the constituency demands on the staff. The training program was expanded and adjusted to accommodate the range of talents, preparation, and interests now actively represented by participating faculty and students. It has been more difficult to respond to the tremendous increase in the volume and variety of requests for data and for professional and technical advice. Fortunately, an early decision to automate the data storage and processing activities has made it possible thus far to keep abreast of the rising demand for many of these services. Financial support from the National

Science Foundation has made possible the recent programs of data collection and the development of a service-oriented archival facility that is something of a model for comparable developments elsewhere.

At the time of the first meetings of the Council and staff it was clear that, unless severely controlled, archival activities could exhaust the resources of the organization. A dilemma was posed by the need to take an active role in increasing scholars' access to essential data while at the same time carrying out the equally important mandates for pre- and post-doctoral training; for the stimulation of new research ventures; and for the development of a small set of crucial communications activities. The provisional decision was to attempt to meet the first need by encouraging wherever possible the development of other archives under conditions of mutual support and cooperation that would permit a widespread division of labor.

To extend the repositing of data in the United States an ad hoc committee was organized to represent other actual and potential archives that might be engaged in the dissemination of data for political research. This committee ultimately sponsored a request for additional organizational funds that were provided by the National Science Foundation and, by mutual agreement, have since been administered by Dr. Charles Y. Glock, Director of the Berkeley Survey Research Center. The membership of the group has subsequently broadened—at the last meeting nearly a score of institutions reflecting a wide variety of disciplinary interests and substantive foci were represented—and the formation of a national council of social science data archives may be expected.

On the international scene, the interest of Consortium participants in data for comparative cross-national analysis has been reflected in the presence of Consortium representatives at half a dozen meetings sponsored variously by the International Political Sociology Committee, UNESCO, and the International Social Science Council. Our experience in creating and operating a service archive containing large, complex and interrelated data collections has permitted us to make some contributions to these meetings and we, in turn, have been alerted to the nature of future problems suggested by the experience of others.

The Consortium's rate of growth is perhaps best understood as part of a response to the rapid changes which a new information technology is now permitting in macrocosmic social research. These developments are quietly but rapidly revamping the scope of endeavor as well as the workways of scholars dealing with macrocosmic phenomena, both historic and current.

The primary catalyst has been the development of computer technologies for the rapid handling and digestion of large masses of information, usually quantitative in nature. The evolution of these capacities has enormously expanded the horizons of the scholar who has analytic problems involving concrete bodies of data, for he is no longer bound to the small amounts of information that he can realistically expect to hand-copy or analyze from tabulations of social statistics. Thus, for example, the investigator interested in some rather general question about characteristics of historical American voting behavior need no longer limit the empirical portions of his inquiry to a "case study" of a particular state in a short time period out of respect for the sheer bulk of clerical labor involved in a broader definition of the problem: he can check out his theoretical surmises over much more extended areas and time periods. Furthermore, data in the new medium of information are very cheaply duplicated and in principle can be transmitted in large masses at lightning speed to interested scholars irrespective of their distance from the source. Hence there remains little reason why bodies of data cannot be simultaneously exploited toward a variety of ends by research workers at a number of institutions, rather than remaining, as they usually have, the secret treasury of the original compiler.

Faced by the possibilities of the new information technology, the workways of the relevant research community have begun to change. In the still rare instances in which key bodies of data are already available in machine-readable form, scholars are eagerly responding to the chance to broaden the scope of the definitions of their research problems. In these cases lengthy and painstaking clerical work can no longer pass for the prime activity of the empiricallyminded scholar, and more time can now be freed for creative thought. And the norms as to the permanent monopoly which an investigator holds over significant social or political data that he has compiled or organized (often with public or quasi-public funds) are also eroding: scholars are rapidly coming to accept the assumption that once their own primary exploitation of self-compiled basic materials is completed, there is an obligation to make them available to other scholars who may wish to expand on the primary research or to use the material for other types of inquiry.

Although individual scholars are adjusting to the new research environment with fair speed, individual responses alone are not enough to exploit this "new world" effectively. There must be major new developments in the social organization of research as well. While the unit cost of producing duplicate bodies of data or data analyses are by older standards incredibly small in time or money, this unit cost presupposes an initial capitalization in computers and programming talent which far exceeds the capacities of individuals or small research groups around the country. The magnitudes of capitalization support are such that a fair centralization of this kind of computer function seems inevitable. This centralization is most palatable to the research community, of course, if the fruits of any such collective effort can in a genuine sense be made available without geographic discrimination. A parallel need for a stable institutional "home" for collectively-generated and owned research materials

also tends to underscore the need for innovation in the social organization of research. One of the reasons why it now seems feasible to invest substantial amounts of research funds in the conversion of historical tabular election statistics into machine-readable tape or punch-card form is the fact that this conversion need only be done once. Unlike private collections held by individual researchers, these data will not disappear or be discarded when the individual retires.

From this point of view, the Consortium represents a major innovation in the social organization of research. The willingness of the research community to pool subscriptions so that a permanent staff can accomplish collectively some of the things that none of the contributors could accomplish alone is, as it seems to us, a fair testimonial of the extent to which the exciting possibilities of the new research environment are coming to be appreciated around the country.

While the new feasibility of machine-readable collections of basic social and political data is a major facet of the Consortium's function, the organization and maintenance of a data repository scarcely exhausts the goals of the organization. Until the newer developments began to register in research, political scientists and scholars from adjacent disciplines had little motivation to preserve and make available with any system the massive bodies of data basic to their professional concerns. Both as a cause and as a consequence, professional training in these disciplines presupposed a paucity of research data. It either focused all of its attention on teaching the student how to generate his own data or, more often, how to get along without it. With the build-up of accessible research materials, many scholars remain ill-equipped to exploit the new resources fully. This is least true of the current generation of graduate students, of course, and even disciplines like history are producing a cohort of younger scholars who are interested in modern data-analytic training. This awakening interest is often short-circuited, however, by the absence of appropriately-trained faculties. The Consortium has been sensitive to this kind of difficulty, and its considerable investment in training programs has begun to help in the "retooling" of existing faculties at many institutions, as well as satisfying many training needs of the current generation of graduate students.

New Opportunities

These trends in research all lie behind the rapid organizational growth of the Consortium and the demand for expansion of its activities. We have become increasingly convinced, however, that the demands for services of this kind imply a level of capitalization that will rapidly outrun the current resources of the Consortium, and there is serious question as to whether the many graduate institutions which now

contribute sufficient funds to allow the Consortium to maintain itself would be able to provide the very much larger subscriptions to allow the organization to undertake the further development which seems desirable.

A program for expansion of Consortium resources would not add new functions but would plan to increase the scope of each current activity.

1. Data resources: Several major collections of data should be developed and added to the Consortium data repository; none of these will be pursued by any other archive known to us. The first collection is the massive information on the U.S. Congress assembled under the supervision of Dr. Clifford Lord in the late 1930's. These data, consisting of an annotated collection of all the roll calls cast in both Houses of Congress prior to 1937--together with accompanying maps of the congressional districts--were amassed by a staff of lawyers and historians, at one point totaling some 350 professional employees. With the abrupt end of the project in 1940, the materials were packaged and stored in the archives of the Butler Library at Columbia University. Through the good offices of Dr. Lord (now president of Hofstra College) and Professors Cross (History) and Sayre (Government) of Columbia University, the entire collection may be loaned to the Consortium for transfer to punch cards and magnetic tape and inclusion in the repository.

A complementary collection of biographical data for the more than ten thousand men and women who have served in the U.S. Congress should also be made. With financing from the Social Science Research Council Committee on Governmental and Legal Processes, a pilot study to provide specimen data and cost estimates for the remainder is now in progress under the direction of Professor Benson. This collection will include detailed information on the congressional career, including committee assignments and similar information pertaining to the organization and operation of the House and the Senate.

These two collections, combined with the election and census material already being assembled, will provide a fund of basic data essential to a host of studies of Congress and of the American political process, in a scope and historical depth now beyond the reach of any scholar or group of scholars.

In addition, a large collection of the returns on state referenda should be added to the repository. These popular decisions on questions of public policy have great value in clarifying the meaning of contemporaneous elections of public officials. The manuscript records or published returns for all 15-20,000 referenda should be collected and selectively added to the repository of computer-manipulable data. Used in conjunction with election returns and census data, they would add another invaluable dimension to the analysis of American politics.

Finally, the data on political, social and economic characteristics of the population should be extended. On one hand, the core data already scheduled for inclusion in the repository should be supplemented while, for other purposes, selected data should be collected for the minor civil subdivisions—townships, wards, precincts, etc.—as well as for the county. It is clear that a comprehensive collection of minor civil subdivisions data cannot at present be given priority without fatal consequences for all other collections; it is also clear that Consortium facilities should be more readily available to support selected activity in response to active research needs.

An entirely different set of research needs could be met by the addition of United Nations roll call data to the repository. Students of international relations and international organizations are already collecting subsets of these data and only a very small part of the total effort envisioned in this expansion of Consortium resources would be needed to complete their work. Moreover, it seems quite certain that the data could be kept up to date in the future through direct access to a copy of the printed record of roll call voting which will be a by-product of the new UN electronic voting system.

The UN data would be particularly useful if they could be matched by data being assembled in the Yale Data Program under the direction of Dr. Karl Deutsch. Contrary to the case for all of the above collections, the Consortium would not collect the data for the Yale Data Program (financed currently by the National Science Foundation) but would take advantage of its close collaborative relationship with Yale and simply acquire copies of the data for storage and subsequent dissemination through the Consortium.

Finally, data essential to comparative cross-national analysis should be acquired from colleagues and archives abroad. Our expectation is that we will continue to enjoy good relationships with foreign resources and will be able to engage with them in reciprocal assistance to meet the research needs of our respective colleagues and constituents.

Without specifying other data collections that might be added to the repository, the general goal should be apparent: the Consortium should continue to develop those basic data resources essential to significant research on American national government and politics.

2. <u>Data processing</u>. While the concept of a large archive of quantitative data is not dependent on any particular technology, the actual creation of an archive able to respond swiftly and inexpensively to requests for data is almost totally dependent on modern computer technology. If many different kinds of data (survey, census, election return, legislative roll call, public record, etc.) of widely varying content (economic, social, political) for assorted units of analysis (individuals, political units) across long periods of time (early 19th to mid-20th century) are assembled in large quantities they must

be so ordered and stored as to be retrievable in almost any subset or combination of subsets. The task--given the centralized collection of data--is to enable the researcher to acquire and manipulate the specific elements germane to his objective without having to fight his way through a mountain of irrelevant material, a battle which could easily drive him back to a monastic hand-copying of precious material from original documents.

The incredibly rich potential inherent in the amount and variety of data appropriate for the repository can be realized only through the use of a high-speed computer for storage, retrieval and data processing. The machine facilities now available to the Consortium are already hard pressed to meet the current demands from users. Expansion and diversification of data holdings cannot be considered apart from a major change in our computing hardware and software.

The acquisition of an appropriate configuration of computer equipment and the development of an appropriate system of data handling will bring important benefits over and above the direct ability to meet the needs of the repository users. One important side effect of our archival work of the past three years has been the stimulation of technological progress at other institutions. Many of the developments of the Consortium Technical Services staff, both in identifying and in solving problems, have been shared widely with other social science archival installations or have facilitated successful alternative approaches to common families of problems. Where in original concept the Consortium staff was commissioned to provide professional consultation on problems of research design and execution, the evolution of the repository and its staff has broadened the meaning of consultation to include professional and technical assistance in the The unique mixture of data full range of problems of data handling. in the Consortium archive will demand a more or less unique system of data processing, a system which must be developed if the data are to be fully exploited. At the same time, solving novel problems of data processing equips the repository staff to aid comparable developments at other institutions. The past few years have seen a fairly general increase in attention to the data-processing problems by social scientists; the Consortium has benefited greatly from work being carried on at Harvard, MIT, Berkeley, and elsewhere. It is also true, however, that most such work has been prompted by relatively idiosyncratic factors that cannot be counted upon to sustain interest in problems of more general concern. Given the needed facilities, the Consortium staff would like to expand its role of contributing to the improvement of other computer facilities used by social scientists.

3. Training. The third major expansion of Consortium activities should occur in our program of professional research training. For the foreseeable future, the opportunity for political scientists, historians, and others to pursue intensive work in research methods and technique is a necessary complement to the development of new

data resources. In particular, optimal utilization of the repository by historians will depend on complementing their traditional regard for evidence with new research skills allowing imaginative and sophisticated analysis of data.

Just as the data library is designed to serve a multitude of different research goals, so the Consortium training program attempts to respond to an extremely heterogeneous set of individual and institutional needs. With the summer program located in Ann Arbor, participants from schools that do not offer standard work in survey research may take advantage of the array of courses given by the Survey Research Center in its annual Institute on Methods of Survey Research. principal sequence of courses offered specifically by the Consortium complements the SRC courses. It extends the methodological focus beyond survey research to a more general concern with the full array of quantitative methods in the social sciences; at the same time it concentrates on those techniques most appropriate to the analysis of contemporary political phenomena. Within this framework, the content progresses from year to year as established modes of research are more and more adequately transmitted through the literature of research and as newer developments from the "cutting edge" of research become candidates for dissemination through Consortium courses. The basic integrating concept anticipates simultaneous evolution of data resources, innovation in the technology of data analysis, and training in the application of the new technology to the data.

One of the most pressing training needs of the next few years is being created by the growing repository of historical data. Ironically enough, within the social sciences it is the historian who, with a few notable exceptions, has been least involved in methodological revolution and renaissance of the past two decades. Now, however, the juxtaposition of motivation and potential data resources makes possible a magnificent "leap forward" by a significant part of that discipline.

As with political science a decade earlier, history is not institutionally well equipped to exploit the situation. Few departments have more than one or two faculty members currently directing systematic quantitative graduate research; no department offers training in the fundamentals of such research; established recruitment channels seldom bring students to History with undergraduate training appropriate to quantitative research. Despite all of this, the interest in quantitative methods has grown steadily through the postwar period. A very substantial demand for training to use new data resources now exists, particularly among younger members of the profession.

One implicit measure of the demand has been provided by the phenomenal effort which produced the collection of county-level election returns—an effort which relied on scores of voluntary contributions of time and money to locate and retrieve the source material on which the collection is based. A second manifestation of interest

has been directly reflected in the work and plans of the AHA Quantitative Data Committee. Working with the Consortium staff, plans have been laid for the development of a three-week exploratory seminar in methods of historical analysis, to be offered in 1965. Participation in the seminar is underwritten by a training grant from the National Science Foundation. Seminar leadership is supported by the Consortium and by the Social Science Research Council, which has provided summer salaries for two of the seminar leaders. These men, Professor Samuel Hays of the University of Pittsburgh and Professor Murray Murphey, University of Pennsylvania, will devote a substantial part of their summer's work to planning for an intensive six-semester-hour sequence of course offerings that would be carried as a part of the Consortium training program in 1966.

Contrary to the experience of political science, it is possible that history may move into the widespread use of modern research techniques with great speed and alacrity. In addition to an intellectual climate in the social sciences which will foster these developments, and a strong cadre of established scholars who, along with their students, will do much of the pioneering work, the Consortium has the potential to inaugurate a training program that will greatly speed the spread of research skills and the development of new standards of excellence for research. There is no gainsaying the trials and tribulations that must be endured by producer and consumer alike until new techniques and new modes of thought have been thoroughly assimilated. However, if Consortium training facilities can be expanded to play a role commensurate with the new data facilities, the cross-disciplinary fertilization of the historians' workways should proceed swiftly and the evolution of indigenous approaches appropriate to the new challenges can be expected to follow shortly.

Summary

The expansion of data resources, data-processing capabilities and research training facilities would mark a major phase in the evolution of the Consortium. Access to the pre-existing resources of a research organization would be supplemented and complemented by the creation of a wholly new set of resources.

Both in broad outline and in specific detail, these are rescurces designed by the needs of an important and growing segment of the social science community. The new resources would make possible a vigorous assault on major problems of the contemporary world as well as on problems defined by the traditions of scholarship. If the United States was the first new nation of the modern epoch, there is much yet to be learned about the evolution of American institutions of government. Much that is to be learned rests on large-scale investigations, including studies that compare and contrast the American

experience with that of other nations. The pretentious ambition to understand complex institutions, societies and nation states has never been properly supported by the necessary resources of data and has long suffered the obstruction of anachronistic and inappropriate workways. The cultivation of the needed resources is apparently largely beyond the capabilities of individual scholars, however much the exploitation of the resources rests on individual scholarship. The Inter-university Consortium for Political Research has established itself as a unique social organization capable of providing scholars with the support necessary for significant research on significant problems. A major expansion of its facilities would make it possible to bring the full force of modern social science to bear on many of the central intellectual and political questions of our time.

May, 1965

State of the Archives

Below is an annotated list of materials currently part of or to be acquired for addition to the Consortium data repository. Self-explanatory main headings describe the status of "cleaning," editing, etc., of both data and codebooks.

Questions about the location of these materials at a given university should be directed to that university's official representative to the Consortium.

A. Studies for which data and codebooks have been cleaned, and the codebooks and supporting documentation have been sent to official representatives. Data are in BCD (single punch) format and stored on tape. Codebooks are machine-readable.

Survey Research Center, Political Behavior Program -Major Studies. These are cross-section national surveys
with between 1,000 and 2,000 respondents each. Respondents for the 1958 election study were interviewed only
after the Congressional elections of 1958; for the remaining studies, interviewing was conducted both before
and after the general election. The average interviewing time (pre and post) was about one and one-half hours.
Many questions are replicated across all of these
studies. However, each has questions not asked in any
of the others. See Campbell, Converse, Miller, and
Stokes, The American Voter (New York: John Wiley and
Sons, 1960), for a description of the contents of these
studies.

- *1. 1952 Election Study (1,799 respondents, 8 cards of data per respondent).
- *2. 1956 Election Study (1,762 respondents, 9 cards of data per respondent).
- *3. 1958 Election Study (1,450 respondents, weighted to 1,822; 7 cards of data per respondent).
- *4. 1960 Election Study (1,181 respondents, weighted to 1,954; 10 cards of data per respondent).

^{*} Survey data

*5. 1962 Election Study (1,297 respondents, 2 cards of data per respondent).

Survey Research Center, Political Behavior Program -- Minor Studies. A restricted set of political items are sometimes added to Survey Research Center studies having other major purposes. Political, demographic, and other items of possible interest are extracted from the large study to form these minor studies.

- *1. 1948 Election Study (662 respondents, 1 card of data per respondent).
- *2. June, 1951, Foreign Affairs Study (999 respondents, 1 card of data per respondent).
- *3. October, 1953, Study (1,023 respondents, one-half card of data per respondent).
- *4. October, 1954, Domestic Affairs Study (1,139 respondents, 1 card of data per respondent).
- *5. October, 1960, Study (1,390 respondents, 1 card of data per respondent).

Consortium Repository Additions

*1. Almond-Verba Five Nation Study. A crossnational survey of five Western nations -- the United
Kingdom, Germany, Italy, Mexico, and the United States.
Emphasizes variables about political partisanship,
political socialization, and attitudes toward the political system and culture as a whole. See Gabriel Almond
and Sidney Verba, The Civic Culture: Political Attitudes
and Democracy in Five Nations (Princeton: Princeton
University Press, 1963) for a description of the contents.

There are four cards of data for each respondent in the survey. The number of respondents for the United Kingdom is 963; Germany, 955; Italy, 995; Mexico, 1,295 (weighted); and the United States, 970.

**2. Cross-Polity Survey Data. A collection of aggregated, "hard" and "soft" data on 115 nations. A variety of variables pertaining to population, literacy, type of government, etc. Arthur S. Banks and Robert B. Textor, A Cross-Polity Survey. (Cambridge: The MIT Press, 1963.)

^{*} Survey data

^{**} Aggregative data

- **3. Yale Political Data Program Information.
 "Hard," aggregated data collected from the United Nations, census departments, and other official organizations -- about 141 different political units. There are four cards of data per country. See Bruce M. Russett, World Handbook of Political and Social Indicators (New Haven: Yale University Press, 1964).
- **4. Press Data on Legislative Reapportionment.
 Population and representation totals for all legislative districts of both houses of the American National and fifty state legislatures. Glendon Schubert and Charles Press, "Measuring Malapportionment," American Political Science Review, Vol. LVIII., No. 2 (June, 1964).
- B. Studies for which the data have been cleaned, but codebooks have not been reproduced, or have not been distributed to official representatives.

Survey Research Center, Political Behavior Program -- Major and Minor Studies

- *1. Fall, 1962 German Embassy Study. A national survey in the United States with special focus on American attitudes toward Western Germany; the usual Survey Research Center political and demographic variables are included.
- *2. December, 1963 Kennedy Study. A national survey in the United States conducted after the assassination. A number of items pertaining to perceptions of the presidential transition and to political preferences; the usual Survey Research Center political and demographic variables are included.
- *3. 1964 Election Study. Major Survey Research Center study, pre- and post-election interviews with national sample of 1,450; there are 13 cards of data for each respondent. Particular emphasis on ideology, foreign policy, civil rights, reference groups.

^{*} Survey data

^{**} Aggregative data

Consortium Repository Additions

- *1. NORC 1944 National Study. A national survey conducted before and after the 1944 presidential election with a sample of 2,030. Particularly interesting since many questionnaire items are phrased almost like those in later Survey Research Center surveys. See Sheldon J. Korchin, Psychological Variables in the Behavior of Voters (unpublished doctoral dissertation, Harvard University, 1946).
- *2. NORC 1947 National Study. A national survey pertaining mostly to general political attitudes.
- *3. 1959 Wahlke-Eulau Legislative Study. A survey of legislators in four state legislatures. In addition to the usual political and demographic variables, many items pertain to perceptions of the political system.

 John C. Wahlke, Heinz Eulau, William Buchanan and Leroy C. Ferguson, The Legislative System. (New York: John Wiley and Sons, Inc., 1962.)
- *4. 1954 Stouffer Study: Cross-section and Leader-ship Samples. A national survey of the American public and of local notables about attitudes toward Communism. A variety of variables pertaining to underlying dimensions of these attitudes; e.g., conformity, tolerance, etc., are included along with some measure of partisanship and past political behavior and standard demographic variables. Samuel A. Stouffer, Communism, Conformity and Civil Liberties. (Garden City, New York: Doubleday, Inc., 1955.)
- 5. Roll Call Records for the United States Senate and House of Representatives: Continental Congress to the Present. Prepared from decks purchased from the Congressional Quarterly, the following sessions are available:

Senate	House
1962	1962
1961	1961
1958	1959
1957	1958
1956	195 7
1955	1956
	1955

^{*} Survey data

It should be noted that codebooks for many of these materials simply reference <u>Congressional</u> <u>Quarterly</u> descriptions, and will not be in machine readable form for some time.

- C. <u>Materials being actively processed into the archive</u> -- the cleaning of data and codes, and keypunching of codebooks are underway.
 - *1. Brookings Institution, Study of Occupational Values and the Image of the Federal Service. Variables are the values and goals Americans find or try to find in their occupations, and perceptions of the federal government as an employer. Interviewing was conducted during 1960 and early 1961.

Interviews were with more than 5,000 persons (unweighted) of various occupational groupings; there are about 20 data cards per respondent.

Processing is well underway and release is planned within six months.

- See F. Kilpatrick, M. Cummings, and M. K. Jennings, Source Book of a Study of Occupational Values and the Image of the Federal Service (Washington: The Brookings Institution, 1964).
- *2. New Haven Study. This data is the New Haven cross-section survey number two used in Robert A. Dahl's Who Governs (New Haven: Yale University Press, 1961). The study focuses on respondent's information about and attitudes toward community problems.

This community sample has interviews with 525 respondents. There are 4 data cards per respondent.

The study is expected to be released midsummer, 1965.

3. Roll Call Records for the United States Senate and House of Representatives: Continental Congress to the Present. Houses and sessions not listed under item B5, above, are being added to the repository.

A number of scholars are coding roll calls, to be punched and distributed by the ICPR staff. Coding is according to a standard format and code scheme was developed by the ICPR staff.

^{*} Survey data

**4. Data from the 1952, 1956, and 1962 County and City Data Books, Bureau of the Census. Each file contains, in machine readable form, population, manufacturing, agricultural, and other data for each of the more than 3,000 counties in the United States. The data cards and tapes we have are copies of those used by the Bureau of the Census to prepare the County and City Data Books.

These data await the addition of a standard numeric county code, defining the universe of counties which have appeared, disappeared, and reappeared since 1820. This code is well under way, but requires more research on boundary and name changes before completion.

- **5. Scammon Election Data from Volumes 1-4 of America Votes: county election data for President, Senator, Congressman, and Governor. The data have been cleaned and edited, but require addition of the standard county code described under item C4.
- **6. 1960 and 1962 Congressional District Data Books, Bureau of the Census. Election, population, and demographic information compiled by the Bureau of the Census, but not available in machine readable form from them.

Punching and machine verifying are complete for the 1960 materials. However, the codebook has not been key-punched and reproduced.

Punching has begun on the 1962 data but the data will not be ready for distribution for at least six months.

**7. <u>Historical Election Materials</u>, <u>by County</u>, <u>1824</u> to the Present.

Using the facilities and resources of state committees, the raw data -- on microfilm, handwritten copy, Xeroxed copies, etc., -- have been collected and deposited in Ann Arbor for keypunching and processing. These raw data are for the offices of governor, senator, congressman, and president. Punching is about 30% to 40% complete.

^{**} Aggregative data

For a number of reasons, including cost, the data are being punched in a form not immediately useable by standard computer programs. Data were not recorded in a standard form, so we cannot punch them in a fixed format without considerable delays and increased cost. Rather than try to rearrange the data arrays by hand, we are punching data in the order presented and tagging each field in each data card with special codes indicating what the field is.

Because of the size of this data base and the complexity of its coding, we are preparing to do most processing of the data on an IBM 360, to be available to the Consortium during the third quarter of 1966.

The historical data seminar is utilizing a very limited analysis capability on equipment presently available. Thus, under certain conditions we can perform a limited analysis, but will not be able to supply analysis decks until after arrival of the IBM 360 computer.

- D. Materials to be processed into the archive.
- *1. Bureau of Applied Social Research, Columbia:
 The Erie County Study, 1940. These are the data on which
 Lazarsfeld, Berelson, and Gaudet, The People's Choice
 (New York: Duell, Sloan, and Pearce, 1944) was based.
- *2. <u>Bureau of Applied Social Research</u>, <u>Elmira Study</u>, <u>1948</u>. <u>Empirical base for Lazarsfeld</u>, <u>Berelson</u>, and McPhee, Voting (Chicago: University of Chicago Press, 1954).
- *3. NORC 1948 Election Study. A study based on samples in three states -- New York, California, and Illinois.
- *4. OCSR Seven Nation Study. A study of teacher's attitudes, in seven Western European countries, toward their occupations, international affairs, and citizen influence over governmental decisions. The director for the coordination of these studies was Eugene H. Jacobson, Michigan State University.

^{*} Survey data

- **5. National Council of Churches of Christ in the United States. Census of religious membership by county for 1950.
- *6. Purdue Opinion Panel, High School Attitudes, 1947-1962. Collected by Professor Remners of Purdue. The raw data are in storage and will be processed only on financed request.

P.O. Box 1248 Ann Arbor, Michigan 48106 Phone: 313, 764-2570

June 1, 1965

To: Members of the American Historical Association Committee to Collect the Basic Quantitative Data of American Political History

From: Howard W. Allen, Director of Data Recovery, Inter-university Consortium for Political Research

Re: Progress Report

I. PROGRESS OF ELECTION DATA COLLECTION

Following is a summary by major office of the county level data in our files (1824-1962) as of June 1, 1965.

	Total elections	Recovered data	Percentage recovered			
Governor	2,305	2,193	95.1 (an	increase	since Oct. of 1.7%)	1
U.S. Representative	3,013	2,620	87.0 (an	increase	since Oct. of 5.3%)	1
U.S. Senator	844	82 3	97.5 (an	increase	since Oct. of 4.9%)	1
President (1824-1960) 1,340	1,281	93.8 (an	increase	since Dec. of 3.2%)	1

As the table suggests, the increase in the flow of missing data since October has not been dramatic, but it has been continuous. Since arriving in Ann Arbor, I have received a substantial collection of returns from 15 states; and through correspondence and personal contacts at professional meetings, I have obtained assurances from a large number of state chairmen and state archivists that additional data will arrive in time. I anticipate that this gradual flow will continue and by the end of the summer well over 95% of the data will be in our files. The state chairmen have cooperated splendidly and the continued success of this operation is in no small way due to them.

The missing data are itemized by office and state in the attached addendum. To summarize that information, in only 16 states are more than 10 sets of returns unaccounted for, and in only 11 are there more than 20 elections outstanding. The 11 are:

Connecticut	New Hampshire
Delaware	Mississippi
Georgia	Rhode Island
Kentucky	Texas
Louisiana	Vermont
Maine	

While the reaction of the state chairmen to requests for data has been prompt and effective, only a few responded to requests for other kinds of information. Only eight chairmen, for example, sent the names of the members of their state committees. A second item of concern is that some of the historians who originally agreed to serve as state chairmen have withdrawn to be replaced by political scientists and archivists. While the cooperation of persons in all related disciplines is certainly to be welcomed and encouraged, it is hoped that the number of historians involved will not continue to dwindle away. Most of those who have withdrawn, it should be noted, were established historians with many other commitments.

II. COLLECTION OF REFERENDA

Referenda has been collected for 6 states, and chairmen in several other states have indicated that efforts to bring these data together have been initiated. Requests for referenda were mailed only to those states where chairmen had completed their collection of county level returns for Governor, Senator, and Representative. In other words, I avoided asking for referenda from chairmen who are still collecting county data. To ask for too much too quickly, I think, would risk burdening state chairmen needlessly, and the volume of material already collected is certainly great enough to keep the key punchers and the Director of Data Recovery busy in the meanwhile. In the future, as the initial requests are filled by state chairmen, I shall ask for the referenda.

III. DATA PROCESSING

Since about November 1 most of my energy has gone into preparing the data on hand for key punching. This is essentially an editing responsibility and includes selecting the most reliable data, identifying candidates by party, indicating to the key punchers which columns should be included, and preparing an annotation. Because the party affiliation of some candidates, particularly in the early nineteenth century, is very difficult to ascertain, it has been necessary to create a file of unclassified candidates for each state. This file and an annotation will be included in the code book to accompany all data sent from the Consortium.

To eliminate unnecessary duplication and expense, I have written to the compilers of all publications of election data known to me to inquire if their data were processed on IBM cards. Several compilers did prepare IBM decks, and duplicate sets from Arizona, California, Indiana, Kansas, Illinois, Kentucky and Oklahoma, as well as the cards for most of the data covering 1950-1960 from Richard M. Scammon's America Votes, are now at the Consortium. Additional processed returns have been promised from Texas and Iowa.

Keypunching of the data is well underway. Processing of data was at the beginning slow, but the project was new to the Consortium and, as is often the case with fresh research undertakings, a number of unexpected problems developed. The data for five states have been keypunched, and two other states are very close to completion. As new keypunchers have been added to the staff, the rate of progress has accelerated significantly, and there is good reason to expect that the county election data for the four major offices will be completed within the next 12 to 15 months.

County	Election	Data	Needed	As	0f	June	1,	<u> 1965</u>

	State	President	Senate	House	Governor
	Ala.	1892, 1896, 1900, 1956			
	Alaska				
	Arizona				
	Ark.	1900, 1912, 1916, 1920, 1924, 1944		1846,1854, 1858,1862(CSA) 1864(CSA),1902, 1910	1866,1868,1870
	Calif.			27.20	
	Colo.				
	Conn.			1825-1831,1837- 1841,1847,1849, 1853	1824-1838, 1842-1844
	Delaware	1928, 1932, 1936	1928,1930, 1934,1936	1834,1840,1894, 1896,1928-1938	1828,1920, 1924,1928, 1932,1936
	Florida				
	Georgia	1824, 1828, 1832, 1888, 1908, 1920, 1924, 1928	1918	1824-1836,1846, 1861(CSA),1863 (CSA),1888-1920	1825-1833, 1861(CSA), 1863(CSA), 1884-1890, 1904-1910
	Hawali			1960,1962	2504 2520
	Idaho			1892-1896,1916- 1920	1916,1918, 1920,1946
	Illinois				
	Indiana				
	Iowa				
	Kansas				
(mi)	-	1920, 1924, 1928, 1932, 1936, 1940, 1944, 1948, 1952,	1918	1896-1918,1932, 1962	1963
\		1960, 1956			

State	President	Senate	House	Governor
La.	1824, 1836, 1848 1880, 1884, 1888 1892, 1896, 1920 1928, 1932	3,	1824-1832, 1836,1843, 1845,1361, (CSA),1863, (CSA),1864, 1874,1876, 1916-1926	1824,1828,1831, 1853,1908
Maine	1824		1824-1836, 1840-1845, 1850-1858	
Maryland	1824		1835,1843, 1847,1912	
Mass.				
Mich.				
Minn.				
Miss.	1824, 1856, 1868 1944, 1956	•	1825-1831, 1835,1839, 1841,1857, 1861(CSA), 1863(CSA), 1888-1894, 1902-1906, 1912,1916, 1926,1962	1825-1833, (biennia1), 1861(CSA), 1863(CSA)
Missouri				
Montana				
Nebr.			1878	
Nevada				
N.H.	1824	1918	1825-1839, 1843,1845, 1851, 1855- 1861,1880- 1886,1918	1824-1837, 1918
N.J.			1836,1846	
N.M.		1946	1946,1950, 1954	1914,1946, 1950

State	President	Senate	House	Governor
New York				
N.C.				
N.D.				
Ohio			1824-1832	
Okla.				
Ore gon	1880			
Pa.	1888		1824-1832, 1836,1844, 1846,1848	
R.I.		1934	1827,1829, 1831,1843, 1845,1849, 1851,1855- 1871,1875, 1878-1902, 1950,1934	1824,1825,1831
s.c.			1824-1868, 1930	
S.D.		1960		
Tenn.	1832, 1848, 1852- 1860		1863(?)	1861(?)
Texas	1900, 1932-1960 (minor parties only)		1845,1847, 1853,1861 (CSA),1872, 1874,1876, 1888,1898, 1916,1922- 1962	1845,1847,1851, 1853,1855,1863, (CSA),1916
Utah		1934,1946	1934,1946	
Vermont	1824, 1892, 1900, 1908, 1960	1920,1922, 1926,1928, 1932,1934, 1938,1946	1824-1854, 1862-1866, 1882-1952, 1960,1962	1824-1836,1892

State	Presiden	<u>Senate</u>	House	Governor
Virginia	1868, 1900, 1	.904	1825-1837, 1841,1845, 1861(CSA), 1863(CSA), 1906,1910	1863
Wash.			1890,1910	
W.Va.	1892,1900		1864,1866, 1872,1888, 1890,1892, 1896,1904, 1908-1912	

Wis.

Wyo.

Review of Service Activities

Although processing of new data collections for inclusion in the archives proceeded at a moderate pace during the past year, the staff activities servicing requests for data increased at an astounding rate. Indeed, the demand for source data and computer output reached such a peak in later months of the year as to deflect available personnel from adding to the archives studies in less demand. In the course of the past twelve months more than thirty member schools have received data through the Technical Services group. Approximately 900,000 cards were shipped to Consortium participants providing them with more than 300,000 cards created for analysis purposes and more than half a million cards of basic storage data. The equivalent of another two million cards were distributed through the shipment of tapes. Approximately 100,000 pages of printout were shipped to participants; these included at least 50,000 tables of data and statistical computations.

This rather massive dissemination of data was supported by a commensurately large distribution of supporting materials. For example, approximately 200 copies of codebooks and supporting documentation for the Almond-Verba study were distributed. The volume of work represented in servicing requests for data placed a substantial strain on staff personnel and on our operating budget. Although it is probable that some of the requests represented first-time requests for basic material, we are planning the allocation of next year's resources to accommodate a continued increase in the volume of servicing activities.

Repository Expansion, 1965-1967

Detailed plans for continued expansion of the Consortium repository were made following a conference sponsored jointly with the American Historical Association Quantitative Data Committee, held at the Fels Institute, Philadelphia, Pennsylvania, October 16, 1964. The consensus articulated by the political scientists, historians and demographers in attendance was translated into a major proposal submitted to the National Science Foundation. This proposal has been supported in full and therefore assures implementation of plans that have been developed over the past one and one-half years.

A REPORT ON THE CONFERENCE ON HISTORICAL DEMOGRAPHIC DATA

AT FELS INSTITUTE, UNIVERSITY OF PENNSYLVANIA, OCTOBER 16, 1964

Prepared by Professor Samuel P. Hays, University of Pittsburgh

A Conference on the Collection of Historical Demographic Data was held at the University of Pennsylvania on October 16, 1964. This Conference grew out of the activities of the Ad Hoc Committee on the Collection of the Basic Quantitative Data of American Political History, a committee of the American Historical Association, and the Consortium for Political Research. The work of the Conference was a logical outgrowth of the project to collect county election data which at the time was well under way, as well as of the similar project to collect roll call congressional votes.

One of the major features of the Conference was that it drew together interested individuals from other disciplines as well as demographic experts and representatives from the National Archives and the Bureau of the Census. A complete list of those attending the Conference is attached. The Conference marked a step forward not only in the specific plans for data collection, but also in the growing contact among those in many different and often separate activities who are all equally interested in historical demographic data. It is fully anticipated that this contact will grow closer as a necessary element of the entire project.

It is apparent, moreover, that the extension of the Ad Hoc Committee's activities into the demographic field renders its activities of interest to a far wider group than merely political historians. The population, economic, religious, ethnic, educational and communications data which the Committee expects to collect will be of use to historians of all specializations who wish to undertake aggregate analyses of any historical phenomenon on the state, county or minor civil division level. As this Conference report is circulated and considered, it is hoped that it will receive comments and suggestions from all such historians.

PARTICIPANTS

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Summary of Recommendations

- I. Survey of sources. Although some data is readily available in printed federal census sources, the availability of other data in less readily accessible sources is not clearly known. Special manpower needs to be allocated for the survey of these sources, among which are the following: unpublished manuscript federal non-population schedules, especially economic and religious; state census data, both published some idea of which is available from the Dubester bibliography and unpublished; material in non-census governmental sources at the federal and state level; material in private sources, especially concerning religion; material collected by municipal agencies.
- II. Bibliography. A bibliography of collected historical demographic data, both printed and manuscript, is badly needed. This should also include a survey of mapping already completed. Special manpower is needed for this also.
- III. City data. Data should be collected for cities as well as counties. Much census data is available for cites of varying sizes and, over the years, the city has become more refined and more specific for minor civil divisions even down to the block level for the more recent housing censuses. Although minor civil division data is needed for rural counties it is even more vitally needed for cities.
- IV. <u>Sampling</u>. Projects should be developed for sampling manuscript census returns to determine its feasibility for minor civil division analysis. Such projects should make sure that the unit from which a sample is derived by as small as required for election analysis.
- V. County data: schedule for immediate processing. The following classes of data, available already in aggregated form, should be processed immediately.
 - a. Nativity: country or state, first and second generation.
 - b. Race.
 - c. Religion.
 - d. Area square miles.
 - e. Total population.
 - f. Age distribution.
 - g. Sex.
 - h. Percentage urban, in different size categories.
 - i. Value of land and buildings, both rural and urban.
 - j. Value of manufactured products.
 - k. Occupation.
- VI. <u>Further committee work</u>. The Committees should continue their work, especially in searching out new sources, in determining what series of data should be processed, and in forming working relationships with experts.

Report: Committee on Religious Data

Chairman: Thomas J. Pressly

The principal sources of statistics concerning organized religion in the United States were identified by the members of the committee as follows:

- a) federal censuses, as indicated in the attached memorandum ("Statistics Concerning Organized Religion in the United States: A Preliminary Inventory");
- reports of the United States armed forces (such as reports by chaplains), and hospital records of the Veterans Administration;
- c) state censuses, as indicated in the attached memorandum;
- d) records collected by religious bodies;
- e) records collected by individual researchers;
- f) statistics collected in opinion polls.

The most satisfactory brief, bibliography and guide to all the above listed sources of statistics concerning organized religion in the United States was identified by the committee members as: Benson Y. Landis, "A Guide to the Literature on Statistics of Religious Affiliation with Reference to Related Social Studies," Journal of the American Statistical Association, 54: 335-357 (June, 1959).

After considerable discussion, the members of the committee arrived at the following recommendations for action by the staff of the Inter-university Consortium.

- 1) That the Consortium staff place on machine records the information concerning churches and church members by county and by denomination which is published in the Federal Censuses of 1850, 1860, 1870, 1890, 1906, 1916, 1926, and 1936, as indicated in the attached memorandum ("Statistics Concerning Organized Religion"). The members of the committee realize that a detailed code and coding procedure will have to be established for this operation.
- That the Consortium staff place on machine records the information concerning churches, church members, and religious preference, by county, by minor civil division (where available), and by denomination which is published in various State Censuses, as indicated on the memorandum ("Statistics Concerning Organized Religion").

- 3) That the Consortium staff compare relevant information collected in the Federal Censuses with that collected in State Censuses in order to determine the relative degree of congruency in the information.
- 4) That the Consortium staff consult with the appropriate individuals in the National Archives and/or the Bureau of Census to see whether information concerning churches and church members collected, but not published, in the Census of 1880, is still in existence. If such information is still in existence, the members of the committee recommended that it be placed on machine records by counties and by denominations.
- 5) That, when and if the Consortium staff decides to place on machine records information concerning cities, it place on records the information concerning churches and church members in cities having 25,000 inhabitants or more published in the Federal Censuses of 1906, 1916, 1926, and 1936, as indicated in the attached memorandum ("Statistics Concerning Organized Religion").
- 6) That the Consortium staff consult with the appropriate individuals in the National Archives and/or the Bureau of the Census to see whether there exists for the Federal Censuses of 1850, 1860, 1870, 1880, 1890, 1906, 1916, 1926, and 1936 in unpublished form information for minor civil divisions concerning churches and church members. If such information is available, the members of the committee recommend that it be placed on machine records.
- 7) That the Consortium staff and/or members of the committee undertake investigations to determine whether cities and counties have collected statistics concerning churches and church membership, and whether states have collected statistics other than as indicated in the Dubester bibliography of State Censuses of Population (see attached memorandum, "Statistics Concerning Organized Religion").
- 8) That the Consortium staff consider the following individuals as a panel of experts to serve as consultants on matters covered in these recommendations:

Mr. Benson Y. Landis, National Council of Churches of Christ in the United States.

Professor Edwin S. Gaustad, Department of Humanities,
University of Redlands, Redlands, California.

Professor Edmund de S. Bruner, Columbia University.

Miss Mabel Deatrick, National Archives, Chairman of the Committee on Church Archives, Society of American Archivists.

9) That the Consortium go on record as urging that a Federal Census of Religious Bodies be conducted in 1966 and at ten year intervals thereafter.

Statistics Concerning Organized Religion in the United States:

A Preliminary Inventory

1) Statistics Collected in Federal Censuses

In the Federal Censuses of 1850, 1860, and 1870, facts were gathered, presumably by the census enumerators, concerning churches. The published volumes of the 1850 and 1860 censuses present statistics, by counties, on:

"Number of Churches" (by denomination)
"Accommodations" - i.e., seating capacity (by denomination)
"Value of Property" - i.e., dollar value (by denomination)

In 1880, the census officials collected, by correspondence with officials of religious organizations, facts concerning the organizations, but no statistics concerning religion were presented in the published volumes of the census.

In 1890, the census officials, by correspondence with officials of religious organizations, collected facts concerning the organizations, and the published volumes of the census present statistics, by counties, on:

"Number of Church Organizations" (by denomination)

"Number of Church Edifices" (by denomination)

"Approximate Seating Capacity" (of church edifices, by denomination)

"Number of Halls, Schoolhouses, or Private Houses" used for worship (by denomination)

"Seating Capacity" of halls, schoolhouses, etc. (by denomination)

"Value of Church Property" - i.e., dollar value (by denomination)

"Communicants or Members" (by denomination)

In 1906, 1916, 1926, and 1936, the census officials, by correspondence with officials of religious organizations, collected facts concerning the organizations. The published volumes of these four censuses presented statistics as follows:

By counties: Total number of communicants or members in all denominations

Number of communicants or members in selected individual denominations

By cities having 25,000 inhabitants or more at last

Federal census:

Number of church organizations (by denomination)

Number of church edifices (by denomination)
Number of communicants or members, by age
(over or under 13 years), by sex, and by
denomination
Number of Sunday School officers and teachers
(by denomination)
Number of Sunday School Pupiles (by denomination)
Seating Capacity of church edifices - 1906 only
Value of church edifices
Debt on church edifices
Expenditure during year

In March, 1957, enumerators of the Bureau of the Census conducted a nation-wide sample survey of the religious preference of the civilian population. 35,000 individuals who were 14 years of age or older were asked the question, "What is your religion?" The results, on a nation-wide basis, were tabulated and published by the Bureau of the Census.

2) Statistics Collected in State Censuses - as listed in Henry J. Dubester, compiler, State Censuses: An Annotated Bibliography of Censuses of Population Taken After the Year 1790 by States and Territories of the United States (Washington, D.C., U.S. Government Printing Office, 1948, 73 pp.)

<u>Iowa: 1925</u> Census of 1925 published data "on the religious distribution of the population by sex" (by counties?) /Dubester,p.20/

Michigan: 1884 Census of 1884 published "miscellaneous tables on the number of churches, schools, and libraries" (by counties? and by minor divisions?) /Dubester, pp. 31-32/

Michigan: 1894 Census of 1894 published information on "Churches" (presumably, number of churches) (by counties? and by minor divisions?) /Dubester, p. 32/

New York: 1845 Census of 1845 published information on the "number of churches according to denomination" (by counties? and towns?) /Dubester, p. 47/

New York: 1855 Census of 1855 published information on "the "number and type of ... churches" by counties and towns /Dubester, p. 48/

New York: 1865 Census of 1865 published data on "churches" (number? and denomination?) "The data are generally given by county or its subdivisions." /Dubester, p. 48/

New York: 1875 Census of 1875 published data on "churches" (number? and denomination?) "by county, town, etc." /Dubester, p. 49/

New York: Census of 1892, 1905, 1915, and 1925 did not publish data concerning churches, but such data may have been collected (by counties and towns) /Dubester, pp. 49-50/

South Dakota: 1915 In Census of 1915, "Data are reported ... according to civil divisions" on "church affiliation" /Dubester, p. 59/

South Dakota: 1925 Census of 1925 apparently includes data on church affiliation, but only for the population of the state as a whole (not by county or minor civil division) /Dubester, p. 59/

South Dakota: 1935 and 1945 Census of 1935 and Census of 1945 were apparently similar to that of 1925 /Dubester, p. 59/

Rhode Island: 1905 In Census of 1905, "Data are given on the religious preferences of the population by sex and place of birth of father, for counties, cities, etc." /Dubester, p. 56/

Report: Committee on Ethnic Data Chairman: Morton Keller

The committee first attempted to define the primary sources of ethnic data, and their relative worth and accessibility.

I. United States Census

A. Published census statistics

Published decennial census statistics on population contain abundant material for the construction of ethnic groupings in time series, and for the detailed examination of population patterns in a census year. At varying times, the Census has initiated statistical breakdowns on Negro-white distribution, native and foreign-born distribution (by state and country of origin), and on children of native or foreign-born parents. This data is organized by state, by county, and sometimes by city wards.

B. Unpublished census schedules

It was agreed that unpublished census schedules, while forbidding because of their mass and because of post-1890 legal limitations on their use, constituted an exceedingly valuable source for the construction of ethnic statistics. Microfilms of unpublished population schedules, by county and for some cities by ward, for the censuses of 1840, 1850, 1860, 1870, and 1880 are available from the National Archives. (See National Archives, Federal Population Censuses, 1840-1880 (Washington, 1955).) Census schedules since 1900 (most of those for 1890 were destroyed by fire) soon will be deposited, along with the 1840-1880 microfilms, at the National Archive's twelve regional centers.

While the schedules since 1900 are restricted, arrangements may be made for specific quantitative findings. Tabulations will be made at cost by the Bureau. In addition, a qualified researcher can be sworn in as an unpaid Census employee, and can work with these schedules, if

the project is an appropriate one and the anonymity of census respondents is preserved. In some cases, it is even possible to have schedules transferred to the locale of the accredited researcher.

Maps of census enumeration districts are available at the Census Bureau. These make possible correlations between enumeration districts and political subdivisions. (County and township boundaries always are observed by the Bureau in the creation of its enumeration districts.)

At present, the Bureau official most informed about ethnic data is Dr. Paul C. Glick, Assistant Chief of the Population Division.

There appears to be little likelihood that the Bureau will do historical series using the unpublished schedules since 1900.

II. State Censuses

It was judged that state censuses also are important repositories of data regarding race, country of national origin, and parentage. (See Bureau of the Census, State Censuses (Washington, 1948), which contains an annotated bibliography of such censuses since 1790.)

Material of special utility should be found in the censuses of New York and Massachusetts.

III. Other Sources

There is good reason to think that bodies of usable ethnic data exist in other repositories, among them customs records; ships' manifests; shipping lists; naturalization records; city directories; voter registration lists; parish records; state board of health records; publications of state bureaus of labor statistics; and the records of industrial and life insurance companies.

However, it was the judgment of the subcommittee that the scope of these records, the problem of their accessibility, and the mass of useful data that might be obtained from the sources discussed in <u>I</u> and <u>II</u> above, militated against serious consideration of these other sources at this time.

The committee also turned its attention to the establishment of priorities for research and planning. The following were thought to be of the most immediate value:

(1) Attempt to establish more precise and sophisticated ways of obtaining ethnic group data. It was thought to be especially important that, in consultation with demographers and statisticians, methods be derived for the reconstruction of ethnic groups beyond the first and second generations.

- (2) Prepare test studies that would utilize unpublished census schedules to reconstruct the ethnic makeup of a political area over a period of time.
- (3) Attempt to determine more precisely what sorts of ethnic data may be derived from state censuses.

Report: Committee on Economic Data

Chairman: Allan G. Bogue

Preliminary Recommendations:

On the basis of the discussion of October 16 (see summary following recommendation) and subsequent conversations with Messrs. Benson and Miller the following recommendations seem in order.

- 1. The basic unit for recording should be the county but the recording of data for smaller subdivisions in selected areas or counties should also form a basic part of the program. It should be remembered that the economic historians and demographers present urged that the state not be completely disregarded as a recording unit for some purposes.
- 2. No specific time period is recommended for initial consideration. Instead it was hoped that from the beginning we should try to to construct time series over as long a period as possible. In many instances, however, satisfactory census data are available only with the 1840 or 1850 census and in some cases subsequent ones. Complete comparability of data over time may often be impossible but this does not need to prevent gathering of certain important categories of information where available.
- 3. If it desired to make a start on just one or two indices, the two that seem most revealing are probably:
 - (1) value of farm land and buildings (the Pressly data)
 - (2) value of manufactured products (although we are investigating some of the problems involved in this index)
- 4. A number of other categories were regarded as having high priority, including
 - (a) basic agricultural staple production
 - (b) forest and fisheries production
 - (c) mineral production
 - (d) other indicators of manufacturing activity
 - (e) construction
 - (f) banking and trade activity
 - (g) characteristics of the labor force

Specific series mentioned included (a) cotton, wool, hemp, sugar, tobacco, wheat, corn, rice, hogs (b) fisheries catch, value of timber cut, (c) value of minerals produced (d) food and kindred products, textiles and textile products, leather products, rubber products, forest products, paper and pulp, printing and allied industries, chemicals and allied industries, iron and steel products, nonferous metals and products, machinery, transportation equipment (or some other comparable system of categories worked out with advice of appropriate experts) (e) housing construction, industrial construction (f) exports, imports, bank deposits, bank capital (g) free-slave, male-female, farmer-farm laborer, factory labor.

Unfortunately, not all of these categories can be recorded with equal ease. (a) through (c) can be simply taken over in their original census form or shown through some original census data. Others require varying amounts of aggregation or other processing to be manageable. How much processing is a question that mone at the Conference could answer with any certainty. Participants found it difficult to assign specific priority to one category of data over another.

5. The conferees were unanimously agreed that a sub-director be appointed if possible to supervise the economic data project. successful completion of the project seems definitely to hinge on successful completion of a considerable number of tasks that can be done only by someone who is in a position to devote full time to the work. Such tasks include: conducting an inventory of sources at the federal, state and regional level, preparing bibliographies of work that already present use and interpret economic data of the sort that we are interested in, investigating the data areas where processing seems indicated, working out recording priorities, checking out data categories, census by census, to see to it that maximum continuity of data is achieved, and supervising any such processing. Such a sub-director would also investigate the practical economics of the project - because it is clear that we cannot in all probability record all the data that every scholar would like to have recorded.

Summary of Discussion in Committee on Economic Data

All agreed that a project designed to collect and record historical economic data was very worthwhile. The basic geographic unit for recording purposes should be the county, it was agreed, but it was also pointed out that the city was used as a basic unit in the manufacturing sector by the federal census bureau and that accommodation to this fact will have to be made. The possibility of recording data for minor subdivisions in selected sample areas also met the approval of the group. Easterlin reminded us that the state unit should not be ignored either.

It was clear from the discussion of the sub-committee that there are a great many categories of economic data that political historians and other varieties of historians, particularly economic, would like to have in a data bank. It became obvious too that although the number of such indicators proliferate somewhat in the twentieth century they could very usefully include a considerable number for much of the nineteenth century as well. For instance, Bogue had brought a list of 109 categories which had been suggested by various historiancs to serve as the basis of discussion; perhaps it was attributable to the innate kindness of those present but none of the listed categories were dismissed as trivial. But in addition other economic series were urged for consideration, particularly in the areas of construction, government expenditures and occupations (this last will however be the province of Hays subcommittee as I understand our division of labor). Hays urged inclusion of indices which would show consumption levels. Lebergott suggested the usefulness of recording almost all of the agricultural and manufacturing data given in the printed censuses.

It was admitted that obtaining maximum comparability of data from one census to another would on occasion present problems. The place to start the task of data retrieval seems to be the reports of the federal census. It became clear in the course of the discussion that the census data which interested the men present were of two types: (1) data, as for example agricultural production figures for the agricultural staples which could be transferred without aggregation or other processing to card and tape (2) other data which could be put in manageable form by some processing - as for instance, lumping together the many manufacturing or occupational categories of the census into a smaller number of categories.

It seems clear also that useful information can be obtained from state census reports and possibly from the reports of state officials, such as the state auditor and state treasurer. One participant stressed the importance of investigating federal publications, in addition to the census, including those of the departments of labor and commerce and the treasury, commission reports, legal cases and miscellaneous publications. The possibility that the N.B.E.R. might have materials of usefulness for this project was mentioned, the approriate contact - Solomon Fabricant.

It may be possible in some degree to find data which have already been put into some sort of usable form that can be incorporated into the Consortium program. Tom Pressly's study of farm real estate values is an important illustration. Mr. Goldfield mentioned that U.S.D.A. carded many data categories of the agricultural censuses of 1930, 1935, and 1940 some years ago. (Bogue has begun an investigation of this.)

Participants urged that other specialists be consulted when our group deals with materials where processing is indicated. Employees of the Department of Commerce, the Department of Labor, and the Census Bureau are familiar with the problems of aggregating occupational groups and manufacturing industries. The names of Dan Kramer, John Kendrick, David Kaplan, and ??? Carroll were mentioned as possible contacts.

Meyer Fishbein stressed the importance of being specific in any such requests for aid. Professor Friedman or other veterans of the University of Chicago monetary seminar (e.g. Anna Schwarz of N.B.E.R.) may be helpful advisers in determining adequate indicators of banking or fiscal activity. A somewhat different form of cooperation was suggested by several members of the group who felt that it might be possible to enlist some of the resources of regional depositaries like the Eleutherian Mills Library or the mid-western presidential libraries.

Report: Committee on Social-Cultural Data

Chairman: Samuel P. Hays

This Committee was concerned with a variety of types of data not treated under the other Committees. Its scope, therefore, was somewhat unspecific. It discussed the following types of data.

- 1. Population: total population, area, place of birth, age distribution, sex, race, deaths, family size.
- 2. Rural-urban distribution.
- 3. Transportation.
- 4. Communication.
- 5. Education.
- 6. Political output.
- 1. Immediate collection. Some of the above data is available in printed federal census returns, and can be processed with little recovery cost. This includes: total population, area, place of birth, age distribution, sex, race, and rural-urban distribution.
- Rural-urban. More attention needs to be given to the types of classification desired for rural urban data. It was suggested that different size categories of cities be developed, such as 2500-8000, 8000-25,000, 25,000-100,000, over 100,000. It would be desirable also to have breakdowns below 2500 population. Much of the problem arises from the fact the the significance of size differs with time-period. The committee suggested that other types of urbanization data be developed:
 (a) place of location of the city within the county, (b) whether the city is a county seat or not, (c) whether the urban place is incorporated or not, (d) percent of population in the city in manufacturing.
- 3. Communication. One source of data which seems promising consists of post office records, such as pieces of mail circulated, stamps sold, the salary of the post master. The Committee suggests that the availability of this data be explored fully. It was suggested also that important data concerning communications might well be contained in the reports which were made of each area for which a new post office was opened.

In considering communications data, distinctions should be made between personal and mass communications. The former would include telephone and mail statistics; the latter telegraph, radio, and television statistics.

- 4. Education. Data concerning education should include both formal and education libraries. It should include literacy rates, numbers of years of schooling completed, attendance, and for earlier years both number of academies and attendance and number of scholars. More investigation is needed before the types of educational data desired for processing can be specified.
- 5. Political output. Data should be developed to measure the degree of political output of given areas. This can be done in at least two ways: (a) expenditure, by categories such as welfare or education, (b) employees, by categories such as school and non-school.
- 6. Localism cosmopolitanism. A major analytical problem for which data is badly needed is the process by which local areas enter into the larger nexus of developing economic, political and ideological life. The interaction between local and wider forces, and especially the constant impact of the latter upon the former, needs to be described and analyzed quantitatively. It is not clear what data can be used for this purpose, yet it is believed that data is available which can bear upon it. The problem needs considerable attention.
- 7. General suggestions. The committee made several suggestions similar to those made by other committees: that surveys of extant data are badly needed, that sampling from the manuscript census should be conducted on an experimental basis, that data should be collected for cities as well as for counties.

Application to the National Science Foundation for Funds for the Support of a Specialized Facility for Social Science Research

Data Acquisitions
for the
Inter-university Consortium for Political Research
Data Repository

Background and Progress Report

A proposal submitted to the National Science Foundation early in 1963 by the Inter-university Consortium for Political Research sketched out plans for the development of a major data repository, beginning with an eighteen-month period of assembly of data from basic political sample survey studies, as well as a subsequent eighteen-month period terminating in July, 1966, during which an effort would be made to add to the collection as well a lengthy time series of aggregate voting statistics at the county level back into the 19th century. An initial grant of \$95,000 from the National Science Foundation covering primarily the first part of the work relevant to sample survey data began to be used in July, 1963.

Events during the first year of the grant led the Consortium in the spring of 1964 to submit a second proposal relevant to the second phase of the archival development much sooner than expected. In the first place, the timetable on the accomplishment of the goals specified in the first grant had been overly conservative: the organization of the sample survey data projected for assembly was being completed much more rapidly than the original proposal had anticipated. Secondly, the sheer creation of the Consortium repository as a scholarly resource captured the interest of other social science agencies eager to see the accumulation of some of the important bodies that the Consortium had hoped to begin locating and assembling once its technical facilities were established. These other agencies -- principally the American Historical Association and the Social Science Research Council -- had by the spring of 1964 made it possible to mobilize a voluntary effort to cover the location and assembly in raw form of county-level election statistics back to 1824. These raw materials were beginning to accumulate in Ann Arbor at the time the second grant request was made.

The second grant of \$142,900 was awarded for the 1964-65 fiscal year. It was intended to cover the following objectives:

- (1) The transfer of a definitive collection of county-level voting statistics from 1824 to the present from their printed or reproduced form as assembled by volunteer workers in the field to machine-readable form. This collection was to embrace the complete votes for President, the House of Representatives, the United States Senate (from 1914), state governors, and a second major state office in all off-years.
- (2) The designing, by conferences of relevant experts, of priority lists for the collection of county-level demographic data from U. S. Census materials which would be seen as prime candidates for acquisition under some subsequent grant. Such conferences were to include consideration of the problem of selective acquisition of data for minor civil subdivisions below the county level.
- (3) It was hoped as well that pilot collections of minor civil subdivision data from a limited number of states would be processed and added to the repository.
- (4) Once again by a conference of relevant experts, plans were to be made for the addition of various data relevant to systematic studies of judicial behavior and public law, under the terms of some subsequent grant.
- (5) A first set of data on federal court cases, those terminated in United States Courts other than the Supreme Court in 1961, would be processed and added to the repository.

The grant also covered the hiring of a full-time Director of Data

Recovery to maintain communication with the network of voluntary field

workers, and to edit the incoming county election materials in such a

fashion that they would be unambiguous for keypunching. Dr. Howard Allen,

on leave from Southern Illinois University, is currently functioning in

this role.

Of the five original objectives of the grant, three have been fulfilled as of February, 1965. The research conferences projected under items (2) and (4) were held in the fall of 1964. The Conference on Historical Demographic Data found rapid consensus as to the high desirability of processing into machine-readable form basic Census materials at a county level matching the voting statistics back to 1824; and had no trouble in arriving at consensus as to the selection of variables that should be of top priority in rounding out the total historical collection (see detailed report of this Conference, attached). The conference on judicial materials (objective No. 4, above) endorsed the continuation of the easily-acquirable data on federal court cases, but came to the conclusion that there was insufficient consensus concerning priorities for other data acquisition in this area to justify any ambitious collection program or assure it of a high rate of use. The data on federal court cases (objective No. 5) have been processed and added to the repository.

While encouraging progress has been made with respect to the other objectives, it is now clear that they will not be accomplished by the terminal date of the current grant (June 30, 1965). The voluntary data collection network mobilized by the American Historical Association has functioned quite well, and the assembly of the raw materials relevant to objective No. 1 above—the 7,500 county—level elections—is now in its clean—up phase (see report by the Director of Data Recovery, attached). A scattering of data on state referenda and returns from minor civil subdivisions has also emerged from some of the mailings, and these have been preserved for future use, although they are not currently scheduled for processing. While the Conference on Historical Demographic Data stressed the importance of some pilot work on materials from a very limited set of minor civil subdivisions (objective No. 3, above), no raw materials from any geographically concentrated set of minor subdivisions have as yet been supplied by the network. Furthermore, the

possibility has arisen that a primary collection and processing of this type may be attempted in the near future by independent research groups in a few states where momentum in this direction already exists. Hence Consortium efforts with respect to objective No. 3 are largely being held in abeyance at this point, although limited beginnings will be made (on data from Wisconsin, 1880-1900) in preparation for a seminar on the use of these historical materials, to be held under Consortium auspices in the summer of 1965.

In any event, the primary objective of the 1964-65 grant involved the processing of the massive set of county electoral data into machine-readable form, and this effort has been slowed down by a number of unforeseen problems. In view of the novelty of the task we were undertaking, it was inevitable that our timetable for completion of the job as stated in the second grant proposal rested upon a number of "soft" estimates. With seven months' experience now behind us, we feel capable of more informed estimates (see "County Voting Statistics: Cost Estimates for Completion," attached).

The nature of the unforeseen problems encountered deserves spelling out, both to account for our delay, and to emphasize the importance of some of the items in the current proposal which seeks funds to cover the completion of the voting statistics and the acquisition and absorption of the matching county demographic materials.

If the task of transposing published voting returns to machinereadable form had involved nothing more than an editor and a fleet of
keypunchers under appropriate supervision, the original budget and timetable for completion would undoubtedly have been adequate. However,

published materials are in extremely varied formats, coming as they do from agencies at the state level across a century-and-a-half of American history. The Director of Data Recovery has been hard pressed, in view of his other duties, to keep up with even a cursory editing of the materials (delineating the relevant data on the sheets, identifying obscure candidates, etc.) before they go to the keypunchers. Early in the game we were forced to an important tactical decision: either to revise all the published and manuscript material into some standardized format; or to keypunch the materials as they came in their varied formats, and subsequently do the special-purpose programming necessary to reformat the materials by computer. Inasmuch as the prior selection of an optimal format would depend on both substantive and technical information that would not be fully available for another year or more, we elected the latter alternative, although it meant another step of refinement of the materials before they can be said to be ready for efficient access. While this problem had not been totally unforeseen, its magnitude was grossly underestimated in the original timetable.

Secondly, we have become increasingly impressed at the inadequacy of existing configurations of computer hardware and software--most of which have been conceived for natural science or business uses--for manipulation of such massive files of data with some of the peculiar characteristics of social science materials. This does not mean that materials of the mass of the county election statistics, once properly reformatted, cannot be manipulated by existing information systems.

They certainly can. The point is, however, that they can only be manipulated more slowly and awkwardly--and hence at poorer levels of cost-efficiency--than the logical capacities of the technology would suggest.

Happily, hardware configurations well suited to data files of this size and nature are becoming available within the next eighteen months, and the Consortium repository is currently taking steps outside the activities covered by this proposal to provide itself with such facilities. However, the supporting software appropriate for these particular kinds of data and data usage remain to be developed. Hence we envisage in this proposal a major investment in the direction of "systems development," both to cover residual problems from the punching of the voting statistics, and to help program a rational access and maintenance system to exploit the great cost efficiencies of the new technological developments.

Resume of the Current Proposal

In this proposal we are seeking funds of \$375,000 for the period from July 1, 1965, to June 30, 1968, in order to bring to completion in highly accessible form the basic set of historical county-level materials, including both voting statistics and matching demographic information, from 1824 to the present. In view of our current grant, this new proposal represents both a request for an extension of support on the preceding grant, and a renewal of support for repository development.

These funds, to be used over a three-year period, would be focussed on the following three objectives:

- (1) <u>Historical Voting Statistics</u>. Completion by December, 1965, of the absorption into the repository of the 7,500 county-level elections from 1824 to the present.
- (2) Historical Demographic Data. Implementation of the recommendations of the Conference on Historical Demographic Data by processing into the repository selected county-level demographic data of high priority from tabulated United States Census returns. These data would cover the period from 1824 to the present, and thereby match the collection of voting statistics.

(3) Systems Development Activity. The development of a variety of computer programs which have in common the aims of long-term efficiency in maintaining, updating and tapping for research use the massive files of geographically and temporally interlocking data which are now building up in the repository.

The funds would also provide for the maintenance of a Director of Data Recovery and an assistant, who would continue the assembly and editing of raw materials prior to the processing assumed in the first two objectives.

A more detailed description of the work to be covered under each of the three objectives, as well as indications of components of the cost estimates, are provided as supporting material (attached). Here we shall merely summarize a few of the salient points.

In addition to the ground covered by the preceding proposal, the estimates for the completion of the historical voting statistics include funds for research and programming occasioned by the persistent problem of county boundary changes; for the development of machine-readable codebooks which can be cheaply reproduced, disseminated and updated, thereby facilitating intelligent use on a broader geographic base; the programming necessary to reformat the data once punched; and for the acquisition of 1964 election returns to complete the collection.

The county-level demographic data pose a rather different acquisition problem. The published returns from the U.S. Census are centrally available at most research libraries, including that at the University of Michigan. Hence no decentralized collection network is necessary. However, the sheer mass of data available from decennial population censuses, along with other censuses of agriculture, religious bodies, housing, business, governments and manufacturing is so great that processing it

into machine-readable form could easily consume \$400,000 in itself. At the same time, the component data are of very uneven scholarly interest, and hence the primary worth of the materials can be unleashed even with a high degree of selectivity.

The October, 1964, Conference on Historical Demographic Data brought together experts from a wide range of fields to establish the Census data of highest priority (see attached report). Following their recommendations, the most critical materials are to be found within the 15 decennial population censuses since 1820, along with four censuses of religious bodies. It is this set of materials which this proposal anticipates processing into the archive. We have the assurance of Dr. Richard Scammon, Director of the U.S. Census Bureau, that the Bureau will be glad to provide whatever consultation is necessary to clarify the materials and to avoid any effort on our part which would wastefully duplicate unpublished Census materials or materials already in machine-readable form from the past two decennial censuses.

Funds for systems development activity will underwrite the preparation of a number of programs or packages of programs which, once developed, will greatly increase access to files of this nature and size, and reduce costs of access remarkably. One set of such programs, to be conceived for the new IBM 360 model 30, will make it easy to enter the large files for purposes of correction and updating of scattered records, and adding new arrays of information to old records. Other programming will make it easier to cross-analyze data from several sources bearing on the same time and place, and conduct analyses across nested levels of aggregation (county, state, region, etc.). Other programs will help to cope in

optimal fashion with problems peculiar to these types of materials, such as estimations of missing data, or the modification of existing programs to handle missing data in a satisfactory way. There will be some development as well of new data-analytic routines geared to the spacetime coordinates of the material. (For a more detailed statement, see Report attached.)

Related Activities and Sources of Support

It might be noted that the funds requested in this proposal will be devoted to the completion of a major round of capitalization and developmental activity. The running support necessary to maintain the repository from day to day, providing a wide range of data services to users all over the country, is already stabilized by annual subscriptions of \$2500 from each of more than forty graduate institutions in this country. Furthermore, thanks in large measure to the first capitalization efforts of the National Science Foundation, the repository is now able to add important new sample survey studies to the holdings on a highly selective basis.

It is true at the same time that other interested agencies and research groups are currently contributing time or money to developmental aspects of the repository, although necessarily on a smaller scale than the terms of this proposal. Thus, for example, quite outside the terms of this proposal work is going forward on the recovery and collection of basic historical legislative data, through grants or other aid from the Social Science Research Council, the American Political

Science Association and the efforts of numerous scholars around the country. These bodies of data, including Congressional roll call materials and elite biographical material on Congress, will ultimately find their way into the Consortium repository, being enriched by and enriching the other sweep of historical materials already present.

At the same time, the Consortium is engaging in intensive training activities through summer seminars attracting research scholars from all over the United States. Such training is aimed both at the spread of understanding of quantitative data methods and at broadening the appreciation and use of the specific data resources of the Consortium. As one good example, the historical voting statistics involved in this proposal will be the focus for a seminar on Methods of Historical Analysis to be held in Ann Arbor during the summer of 1965.

Of perhaps even greater ultimate importance are comparable developments in Europe and elsewhere outside the United States. In anticipation of international sharing and exchange of data resources, Consortium personnel have participated in a series of archival meetings sponsored by UNESCO and the International Social Science Council. Professor Lee Benson, Chairman of the cooperating committee of the American Historical Association, will present a paper on the archiving of quantitative data for historical analysis at the next meeting of the interested parties in Paris in April, 1965. The activities of the Consortium are thus far a source of stimulation and encouragement for scholars abroad. It is reasonable to expect the Consortium will become the direct beneficiary of these activities in the future, and will be able thereby to augment the research resources of additional segments of the American research community.

Α.	SALARI	<u>ES</u>	1965-66	1966-67	1967-68	TOTAL
	Senior (1)	Personnel: Research Associate: Director of Data Recovery (full time, first				
	(2)	year only)	\$ 11,500			
	• •	(1/2 time for each of 3 years)	$\frac{5,000}{$16,500}$	\$ 5,500 \$ 5,500	\$ 6,000 \$ 6,000	\$ 28,000
	Other 1 (1)	Personnel: Assistant Study Director				
	(2)	(Assistant to Director of Data Recovery, full time) Programmers (varying full-time	\$ 9,000	\$ 9,500		
	(0)	equivalents @ an average of \$6,000)	15,000	17,500	\$ 13,500	
	(3) (4)	time equivalents @ \$3,000)	28,300	30,000	40,000	
	(4)	Secretary to Director of Data Recovery (first year half time, second & third year full time)	2,500	5,000	5,000	
	(5)		-	•	•	
	(6)	Technical Assistance (hourly)	2,500 1,065	2,500 875	2,500 725	
			\$ 58,365	\$ 65,375	\$ 61,725	\$185,465
	Fringe	Benefits	\$ 8,985	\$ 8,505	\$ 8,130	\$ 25,620
						\$239,085
В.	EXPENDA	ABLE EQUIPMENT AND SUPPLIES	\$ 10,000	\$ 10,000	\$ 7,500	\$ 27,500
c.	TRAVEL (1)	Domestic	\$ 2,500	\$ 2,500	\$ 1,500	\$ 6,500
D.	OTHER (1)	Computer time and machine rental	\$ 15,000	\$ 15,000	\$ 9,630	\$ 39,630
		TOTAL DIRECT COSTS	\$111,350	\$106,880	\$ 94,485	\$312,715
		Indirect Costs (20% of Direct)	\$ 22,270	\$ 21,375	\$ 18,900	\$ 62,545
		TOTAL	\$133,620	\$128,255	\$113,385	\$375,260

CLARIFICATIONS

a. <u>Director of Data Recovery</u>. This position is currently being filled by Professor Howard Allen, on leave from his position in the Department of History, Southern Illinois University. He is expected to fill this role again for the 1965-66 year.

CLARIFICATIONS (continued)

The budget anticipates that the need for a senior person in this role will terminate as of the end of the first year, after the voting materials being collected by historians and archivists around the country are all in hand and their primary editing has been supervised. For subsequent cleanup and editing of Census materials, the Assistant to the Director will be maintained a second year. He is likely to be Mr. Ronald Formisano, currently completing his doctorate in the Department of History at Wayne State University. In the final year, the work can devolve completely to secretarial help.

- b. <u>Director of Technical Services</u>. Mr. Ralph Bisco, currently Director of Technical Services for the Inter-university Consortium for Political Research, will spend half time supervising and participating in systems development activity.
- c. Travel. Travel estimates include: (1) funds for trips between Ann Arbor and Washington, D. C., to maintain contact with the Census Bureau (See Background Document IX); (2) funds for travel on the part of the Director of Data Recovery to two or three state archives which inadvertently will be left without being completely mined of voting statistics by voluntary labor of the cooperating historians (exact identity unclear: Mississippi and Georgia are likely candidates); and (3) funds for travel which is almost inevitable, in order to keep the staff concerned with systems development abreast of computer developments at relevant conferences.

Computer Acquisition

The expansion of the Consortium data repository into an extremely large collection of data representing many units of analysis and reflecting a wide range of substantive information through time must be accompanied by the development of a major system for data storage, retrieval and processing. The need is so great, indeed, that the potential utility of the growing data collection cannot be realized even in small part without access to a small, but efficient high-speed computer. As the likelihood of support for repository expansion has increased, the staff has moved to secure the necessary configuration of machinery and supporting software. Within the next year, two or more major requests for funds will be submitted.

Acquisition of funds to purchase the needed data-processing system will have a second major advantage, in addition to making possible the utilization of the new data. With free access to an appropriate machine, it should be possible to maintain our present policy of not charging Consortium participants the marginal costs of providing data services to them. Without such access to a new facility, the cost implications of the volume of service activities are serious indeed. Although it is difficult at this point in our growth to separate developmental costs from service costs, it does seem clear that a continuation of the increase in service activities will shortly find us devoting a major portion of the operating budget to the rental of machine time. Faced with this eventuality it would clearly be essential that we establish at least a system of surcharges for all work beyond some maximum available to each school.

SYSTEMS DEVELOPMENT ACTIVITIES: DETAILED SPECIFICATIONS AND COST ESTIMATES

In general, two major types of programming investments need to be made to develop an efficient and smoothly-running archive handling aggregative historical materials along with sample-survey data. First, there is a certain amount of programming which needs to be accomplished to permit the handling of files of aggregative data of this size and with these peculiarities. Secondly, there needs to be development of analytic programs which can be anticipated will be in common demand for application to these materials.

I. Programming to Handle Large Files of Historical Aggregative Data

A. In addition to programs which permit utilization of the historical election and census data files, the Consortium staff must have the ability to update these files both by correcting records found by users or staff to be in error and by adding new data to the files. New data may take several forms. If the census materials are added, as is likely, to the archive by type of information, not by state, then every county-year record may have to be rewritten and expanded with some frequency. Another type of updating is required to handle extensions of the number of records in a file which will result from adding additional years or states as the data are prepared.

It is difficult to estimate the expense involved in programming these necessary file updating and maintenance routines. The storage device (IBM Data Cell Drive) and controlling computer (IBM 360 model 30) which we anticipate using provide a fair amount of software support to assist us in handling large file problems, but sufficiently detailed specifications on that software are simply not available at this writing. Hence our estimate of one programmer for one year to write, debug, maintain, and thoroughly document these programs for the ICPR staff and users is unavoidably less firm than other estimates given below.

B. An essential task to be performed in any utilization of these large files is a prior sub-setting and reformatting of the data in a fashion tailored to the individual user's needs. One general purpose program or set of subroutines is called for which (a) selects the desired subset of county-year records, (b) selects the desired subset of the variables on those records, (c) reformats the resultant data into fixed length records of identical format (as opposed to the variable-format records in

the storage files), and (d) edits or modifies this sub-file to code missing observations or recode variables in the fashion desired by the user or required by particular analysis programs into which the data will be fed. The set-up for this subsetting, reformatting, and editing program must be as simple as possible so that staff members inexperienced in programming can use it easily in servicing requests.

This program or integrated set of subroutines is estimated to require one programmer one and one-half years to flow chart, write, debug, and thoroughly document.

C. A prerequisite for the effective organization of an archive of county historical data is the compilation of an exhaustive list of county name and boundary changes. For efficient storage of the data, numerical county identification must be substituted for lengthy county name fields. For accurate data analysis, information on county name changes must be readily available to the analyst. The task of collecting complete information on county changes, including an estimate of the number of persons involved in each boundary change, and of preparing a list of the changes, including documentation of the source of information on all changes, will take an historian five months. The keypunching of such a list will require three to four weeks. In addition, a general program will be needed to change the format of data punched with an identifying county name to adjust for the substitution of a county number.

The programming effort for both the descriptive printout and for experimentation on methods of resolving the difficulties in the longer run should occupy the time of one programmer at half time for one year.

D. A major utility of the aggregative data being added to the archives is the power it can supply to analysis designs incorporating data from several sources. To that end, the archive staff is developing a master county code to be used in all files of United States data. This code is partially built into the election and census materials now being gathered and keypunched, but does not appear in other Consortium archive studies now or soon to be fully processed and available to users. The utility of these already processed studies will be enhanced by ready linkage of them with the aggregative materials.

This linkage will require a small amount of programming, and the development of a county code translation "dictionary" for each study in the archive with some county code. This combined task should take one staff person about six months to write, perfect, and document the necessary programs for combining data across files, and to compose the county code dictionaries for each present archive file.

II. Programming on More Analytic Routines Relevant to the Repository Files

- One major and abiding problem encountered in the analysis of Α. social science data of either the sample-survey or aggregative type which is apparently quite unfamiliar in treating experimental observations or natural-science material is the frequent occurrence of "missing data" (information not ascertained from a survey respondent; information on an election race which is legitimately not present for a county in a time series because the election was not held, yet which represents a "hole" in the series for certain units of analysis). Computer programs that make some allowance for missing data do so in various ways, which the analyst must evaluate in relation to his analytic problem before proceeding. More important still, many computer programs of great potential usefulness to social scientists have no provisions for handling missing data at all. This means that missing data must somehow be eliminated from the data set. There are three rather different methods of accomplishing this end: (1) deletion of the unit of analysis lacking the observation from the data analysis entirely; (2) filling in the observation in a null sense through some randomization procedure; (3) arriving at a best "probable" value in the light of other information which is present with respect to the unit, and the total structure of the data. Each of these methods has advantages and drawbacks. Deletion is the simplest and most common method if the original computer program is written with this possibility in mind. However, inserting the ability to delete certain records in a program not so conceived means close to The other methods are often preferable a total reprogramming. in that in principle they may be applied to the data to fill in missing values before submission to the main analytic routine. Furthermore, in view of the fact that many users of Consortium data are at the mercy of computer routines at their home installations which make no provision for missing data, and which users are ill-equipped to modify, suggests the importance of repository flexibility in providing data handled in one or another of these ways according to the specific needs of the user. As part of the systems development activity, then, we propose a major effort in exploring the statistical implications of these methods and the programming to provide for alternative It is estimated that such an effort will occupy treatments. the attention of one staff person over a period of slightly more than one year.
- B. In addition to the development of routines to handle missing data, it is anticipated that users will increasingly desire to modify variables to be used in analysis in a variety of ways. These will most certainly include: normalization of data arrays by either year within counties or vice versa,

generations of new variables through interpolations between existing data points according to specified functions, and recoding of variables in order to optimize the information derived as output from particular analysis routines.

The development of these data manipulation operations or improvement of existing methods, located in the flow of work between the generation of analysis sub-files and the statistical or descriptive analysis of the data, will require the attention of one half-time programmer throughout the two-year period of the grant.

C. New Analysis Opportunities

The ICPR archive with the addition of the aggregative election and census materials present greatly enlarged opportunities for three kinds of research: (a) the utilization of many different sources of data (studies) from several units of measurement (individual, county, state, congressional district) in a single analysis, (b) the use of the geographical coordinates of an individual or county as an analytic variable, whereas this practice has severe limitations in working with national cross-section sample survey data, and (c) the full use of time as an analytic variable, allowing the more direct study of causal models and/or developmental processes.

The first set of new analytic opportunities require substantial development efforts in data manipulation which have been provided for under I (D) above. The second and third kinds of analyses, involving more extensive use of geographical and time coordinates, will require substantial innovative work in data analytic routines. In the use of geographical coordinates, the most useful descriptive statistics or data summaries are as yet neither clearly conceptualized nor implemented in operating computer programs. Also standard statistical algorithms, while perhaps largely sufficient for much time series analysis, require special interpretations when used on time-series data which are not well formulated, much less widely understood.

The fullest use of the added power given the archive by the aggregative materials requires the addition to the staff, if possible, of a statistician-programmer, whose task it would be to experiment with, develop, and document new analytic routines in these two areas for a full two-year period after the voting statistics become manipulable. At the end of this time, it is expected that the activities of this person could and should move toward consultation with archive users and instruction of potential users in statistical matters under the regular Consortium operating budget.

D. Development of an Integrated Set of General-Purpose Computer Analysis Programs

At present, the Consortium staff utilizes an incomplete set of distinct analysis programs largely adopted without change from the Survey Research Center Programming Section. Due to the high servicing volume of the Consortium, any set-up inefficiencies and inadequate documentation tolerable for the Center become far more burdensome for us. Also the strong interest in using the Consortium computing facilities as a research training organ for visiting members makes the development and documentation of an integrated set of analysis programs with standardized set-up procedures and easy-to-use write-ups even more imperative.

Also, in addition to the improvements in the present set of programs suggested above, a substantial pure programming effort is going to be required to translate existing routines onto the new computers which both the Consortium and the University as a whole will certainly acquire within the time span of this grant. Since both the Consortium and the Survey Research Center's medium-size computer and the large University computer will be substantially improved in power and versatility, programs will not in most cases be simply recoded for the new machines but will be modified to take advantage of the greater speeds and larger core memories of the new machines.

To fill in some small gaps in present programs (largely concerned with methods of handling missing data, weighted data, and variable transformations), to improve the ease of use and quality of documentation of these programs, and to carry out the transitions of these algorithms to new computers, will require one full-time programmer for a two-year period.

Proposal for Acquisition of Computer

IBM 360 Model 30

Prepared by

Inter-university Consortium for Political Research
Technical Services Staff

January, 1965

This proposal seeks funds to purchase a small computer for use by the Inter-university Consortium for Political Research.

The Consortium is a partnership between the Survey Research Center of the University of Michigan and 43 American and foreign universities. In design and purpose, the ICPR is organized to facilitate research by sociologists, historians, political scientists and other persons or groups interested in political phenomena. Although the ICPR performs a wide range of services and functions for its members and the academic community, the only activity having major relevance for this proposal is an archive of social science data.

The Consortium repository contains major political surveys conducted by the Bureau of Applied Social Research, the National Opinion Research Center, and the Survey Research Center of the University of Michigan. In addition, the archive includes other major surveys, such as the Almond-Verba Five Nation Study (The Civic Culture), Rokkan's Seven Nation Study, Dahl's New Haven Community Study (Who Governs?), the Wahlke-Eulau legislative study, and Stouffer's large collection reported in Communism, Conformity, and Civil Liberties.

Recently, the archive has expanded to embrace a large quantity of non-survey materials. It contains, in machine-readable form, the roll call voting of members of the United States Senate and House from 1946 to the present; the 1952, 1956, and 1962 County and City Data Book materials; and Scammon's America Votes data. The archival staff has collected and is now converting to machine-readable form, all retrievable United States presidential, gubernatorial, congressional, and senatorial election returns, by county, from 1824 to the present. It has arranged to acquire, on a continuing basis, the records of the United States court administrator's office. It is now organizing the acquisition, in machine-readable form, of all roll call votes from the Continental Congress to the present. Within the next few years the repository will acquire and process an extended array of demographic data. Federal and state census materials will provide the source of these data from the colonial period to the present time. The materials, along with state referenda returns will be collected at the level of the county and selected minor civil sub-divisions for use along with the aforementioned election data.

The Consortium repository contains or is acquiring the above materials in response to demands made by large segments of the academic community. To give a measure of that demand, the several hundred persons at member universities have received the equivalent of more than 2,000,000 cards since the ICPR actively began servicing members in June of 1963. In addition to raw data, the Consortium's Technical Services Group has distributed thousands of frequency tables and statistics generated from the data.

The staff provides a full range of data services to members. A major service, only indirectly appreciable, is the processing of materials into the archives. This phase includes the location and removal of errors such as punches not described in codebooks and inconsistencies between dependent or logically related data columns or fields. Another part of processing removes multiple punches and otherwise prepares data for easy computer processing. Inputting a collection involves recoding data according to evolving conventions so that comparisons between and within collections are facilitated, and so that data from several discrete collections can be combined in a variety of ways. Study processing includes collecting, assembling, and editing the codebooks and materials describing sampling design, interviewer and coding instructions, and validation information.

Study processing is done for a number of reasons. In the beginning phases of the archive it was undertaken for self-protection--to prevent a deluge of questions about discrepancies in and incomplete information about a study. Other reasons were indicated above--facilitate computer analysis, and to make possible comparisons within and across studies and to facilitate intermixing or combining studies. We view the archive not only as a library of discrete studies, but also as a relatively highly integrated body of data. The power of the archive is not only in the provision of high quality, large, general purpose single collections, but also in the ability to combine and compare readily accessible data in ways heretofore impossible using the diverse capabilities of modern, high-speed electronic data-processing equipment.

Direct services to members of the Consortium and other persons using the archive, include preparing subsets of a single study, or several studies, on cards or tape in any format desired for analysis; dichotomizing, collapsing, or otherwise recoding data in accordance with particular analysis needs; and generating scales or indexes and including them in analysis decks or tapes sent to users. We also prepare frequence distributions and multi-variate tables, and are prepared to send computer output generated by commonly used statistical and other analysis techniques.

We make heavy use of computers to accomplish the tasks and render the services described above. Indeed, many of our activities would be economically unsound or impossible without the use of computers. The above description of our activities implies some characteristics necessary to any computer we would acquire:

1. We must have great compatibility with machines at other installations if we are to continue sending data and give users flexibility to use their own equipment.

The most common storage media today are the 80-column card, almost universally a standard, and 7-channel tapes. Seven channel tapes are standard because of the dominant position of IBM. Competing manufacturers like General Electric, Honeywell, Control Data, and Burroughs deliberately design their tape machines to read IBM tapes and to write IBM compatible tapes.

The new IBM 360 series of computers has 9-channel tapes, and information is recorded according to a newly defined industry standard, the ASCII (American Standards Code for Information Interchange) code. Simple because evidence indicates IBM will continue to dominate the University market, it will be important to be able to send and receive IBM compatible 9-channel tapes.

2. A Consortium machine must be capable of making almost any study or combination of studies nearly instantaneously available. At any single point in time, a number of studies in the archive are in high demand. Any system or means of storage that causes great discrepancies in our ability to gain access to studies of nearly equal demand must be avoided.

The fact that a number of organizations using computers need to interrogate and manipulate large quantities of information has led manufacturers to develop mass storage devices capable of making any of millions of characters of information equally accessible.

IBM has recently announced the data cell drive, a magnetic strip device similar in principle to RCA's RACE or National Cash Register's CRAM. A single data cell drive can make any of 800 million strictly numeric characters, or 400 million alphanumeric characters equally available to a computer.

A data cell drive has 10 cells, each holding as much as 40 million characters (80 million numbers) of information. To give an idea of the storage abilities of a data cell, the equivalent of between 5 and 10 million cards can be stored on one drive, with any single card available in an average of one-third of a second.

An ability to prepare analysis materials that, for example, combine roll call information, census data, county election statistics, and interviews with both Congressmen and constituents requires the ability to randomly address items in one file according to information contained in another file.

3. Any machine acquired by the ICPR must be capable of much data manipulation. The study processing and servicing described above involves operations such as subsetting, recoding, reformatting, removing multiple punches, generating new variables according to logical or mathematical rules, searching for illegitimate punches and inconsistent information, and sorting.

This argues for a machine able rapidly to move information internally and to work easily with individual characters. There must at least be an ability to handle decimal arithmetic. This does not mean that we favor so-called character machines or so-called word machines. Computers like the IBM 360 and the Control Data 3200 offer the advantages of working with individual characters associated with so-called character machines. They also provide the fast internal operations and data transfer rates that so-called word machines emphasize. Our demands require the fast movement operations of a scientific machine, but not necessarily the sheer arithmetic power. Our operations tend to be more data processing than scientific computation.

4. An absolutely essential requirement is that any machine we acquire facilitate programming and minimize program rewriting. This is a need not directly implied in previous statements. It arises from the fact that professional programmers, persons who understand the internal operations of a computer and can communicate with it in its own language, usually are not familiar with the content demands of a social science data archive, and the social sciences do not develop professional programmers. Most persons familiar with a social science content domain speak with computers in a so-called problem oriented language, which allows man to speak with a machine in something closely approximating the language with which he states problems. FORTRAN is the most common problem-oriented language used in the United States. Such languages are relatively easy to teach, and assume no knowledge of the internal operations of a computer--thus, they are independent of a particular brand or kind of machine.

A large proportion of the ICPR's bread and butter programs have been written for an IBM 1401. Fortunately, many manufacturers now provide simulations and emulations of IBM 1401's. General Electric, Honeywell, and Control Data have announced programs that translate 1401 language into the machine code of a different computer. Programs usually run faster than they did on the machine they were written for because the competitive machines have faster internal speeds or better input-output capabilities than the 1401. The small model IBM 360's have electronic circuitry which can convert a 360 into a 1401.

In any case, as noted, many of the programs we use were written for an IBM 1401, and we can avoid much reprogramming by acquiring a machine that can either simulate or emulate a 1401.

Manufacturers differ in their ability to furnish other kinds of software aids like general purpose merging and sorting routines, and

input-output utility routines (tape to card, card to printer, tape to printer, tape to tape, etc.) basic to any data-processing installation. We would like as much assistance along this line as a manufacturer can provide.

5. Any machine we acquire must be capable of concurrent operations, i.e., it should be able to keep input-output devices continuously operating at the same time, and be able to allow more than one program to reside in core at once.

I/O devices can greatly limit a machine's processing abilities. For example, a card read instruction on a 1401 requires 75 milliseconds during which neither computing nor input-output can be done. Machines like the Honeywell 2200, the Control Data 3100, and the IBM 360 allow a number of I/O operations to be going on almost simultaneously. We have already indicated reasons why we must have a wide range of input-output equipment—we must have a machine that can make use of these devices. Our present 1401 is being pushed to near capacity simply because only one input-output device can be operating at one time.

To dramatize the point, let us look more closely at the Data Cell Drive. It takes an average of 376 milliseconds to seek a strip within a cell and position it on a drum for reading. The worst case is 600 milliseconds. Reading requires another 50 milliseconds. A machine clearly cannot be tied up and not allowed to do anything else for from one-half to two-thirds of a second. On a Honeywell 2200, for example, such a half-second could mean 100,000 instructions not executed. Summarizing, we know that we have considerable amounts of input-output, using a variety of devices. We cannot be bound by the relatively slow speeds of those devices, or easily anticipate a point when our facility is overloaded and thus not very useful to us.

Getting a machine that allows two or more programs to share core is another way to keep the I/O devices busy. Very few single jobs can keep a variety of I/O devices operating at top speed. Several jobs, each using a different configuration of I/O units, can.

In addition, we can anticipate certain jobs, like sorts involving thousands of cards, or information retrieval operations, that can tie up a central processor for long periods of time or, worse, unpredictable amounts of time. Having the capability to run small jobs simultaneously with such a task would greatly extend our ability to avoid overload situations.

A final reason for having the multi-programming capability indicated above is that it allows us to have a program capable of constantly evaluating priorities in continual operation. Thus, if a data-phone or other tele-communication device interrupted the machine, this program could cause an interrupt in a queue to process the data-phone request. Alternatively, a programmer could interrupt a queue of jobs for a debug run, or for a rush job.

- 6. Any machine we acquire should be expansible to meet presently unforeseen future needs and to handle new input-output devices needed either to facilitate the sending of data to users, or to improve our archival operations.
- 7. Whatever new equipment we obtain should be capable of a long life. This does not mean we unrealistically believe there is now or soon will be a machine that won't be technologically obsolescent in 5-10 years. It does mean we expect that there now exist machines which are very reliable and inexpensive in performance, and assume that standards for recording and transmitting information will not suddenly render obsolete all present methods of communication.

Another reason for desiring a long-lived machine is to maximize programming investment, and to minimize programmer and user training and retraining. We would like to have as much stability as possible over a period of from 6-10 years. Such stability would certainly be useful to our clientele; because it would minimize disruptions inherent in drastic change, and provide the possibility of a highly understandable system of operation.

We desire to purchase a machine for reasons of long time costs. At present, the Consortium rents time from the Institute for Social Research for use of a 1401, and from the University of Michigan Computing Center for use of an IBM 7090/1410 system. The 7090/1410 costs \$250.00 per hour, and the 1401 costs \$50.00 per hour.

Assuming that we stayed in a rental environment, we would be faced with a constantly increasing budget for machine costs, rising steadily from a present minimal rate of \$36,000.00 a year. This cost situation discourages our accepting tasks with unpredictable time requirements, such as information retrieval searches, precludes our offering present data processing services on archive materials for any materials sent by clients, and limits the absolute amount of service we can comfortably provide any given member.

We could easily immediately double our use of the 1401 from the current average of 3 hours a day. Six hours of 1401 time a day means about \$78,000.00 a year simply for using the small computer. Over a six-year period, assuming unrealistically no increase in use of the machine, the outlay for machine costs alone would be nearly \$470,000.00.

Let us consider the situation in a more positive way. At \$2,500.00 per year, the present 40 ICPR members provide an operating budget of \$100,000.00 per year. The Consortium can be on a sound and permanent financial base only if the vast majority of the operating budget can be freed for hiring staff to provide services to members and to remain current with or ahead of developments in methodology, computer use, and analysis needs.

At present, we must find ways through grants to supplement the operating budget. Without grants from the National Science Foundation, many of the present data acquisition, processing, cleaning, and training operations would have been impossible. We are now at the point, however, where we would like to be able to plan for, over an extended period, an expanding but stable operation.

We expect that many training operations will become unnecessary in the long run, and that increasingly, the dominant activity of the Consortium will be its archive and attendant service, and research facilitation in a variety of modes, including the maximization of computer use.

In summary, our continued existence depends either on annual grants or on the possession of a computer so that the majority of the basic operating budget can be used to provide the people who provide the services.

The Consortium's Technical Services Group has examined machines produced or planned by a variety of manufacturers, and, after intensive deliberation, has chosen an IBM 360, model 30.

A major consideration was that, considering both maintenance and purchase costs, the IBM equipment is only slightly more expensive (about 10%) than the least expensive manufacturer (Honeywell), and is less expensive than others.

There is every indication that IBM will continue to lead in both defining and providing software. No other manufacturer offers the variety of programming languages (COBOL, FORTRAN, NPL), or utility packages (sorting routines, libraries of subroutines, application packages like KWIC, etc.).

The 360 promises to be a widely prevalent machine (over 3000, in various models, about 25% of the current number--have been ordered). More important, IBM controls about 75% of the computer market, and provides over 60% of the Consortium's computer facilities. The remainder of the market is split among several manufacturers with Control Data, with about 10% of the University facilities numerically second. Consequently, the probability of remaining compatible with machines at member institutions is highest if we continue with IBM equipment.

IBM provides the largest variety of input-output equipment. In point of fact, a number of competing firms actually purchase IBM developed and manufactured I/O gear for use with their computers. The 1311 and 2311 disk packs, and 1402 card reader-punch are especially significant examples. As already noted, many manufacturers consciously accept IBM's input-output standards in order to remain competitive. In short, IBM's leadership increases the probability of input-output compatibility above the simple market dominance figures.

With the data cell drive, IBM 360 machines provide the mass storage and on-line random access deemed necessary because all our files are high use, and because data intermix requests promise to greatly increase in volume.

At the small machine level, the Model 30 360 offers the best multiprogramming or concurrent operations capabilities. Core protection is provided for multiples of 2000 bytes--easily the greatest amount of storage protection. In addition, the operating system provided for the machine we want to acquire provides for concurrent operations. Consequently, we are guaranteed software as well as hardware that meet our specifications. The programming required to implement hardware capabilities should be minimal.

Publication of Election Statistics

The ability to manipulate large quantities of aggregative data through the use of the computer is an essential but not necessarily sufficient feature of contemporary political research. The great desirability of making data available in published form has led the staff to explore possibilities of publication of the collection of county election statistics. Such publication now seems assured in a ten-volume series to be published by one of the recognized leaders in the field of scholarly publication. Publication plans have been coordinated with Mr. Richard Scammon, Director of the Governmental Affairs Institute. The Consortium volumes will complement his work in the modern period, 1920-1964. The county election statistics in full detail, including minor party votes, will be published under Consortium sponsorship for the period 1824-1948.

Expansion of Archival Holdings

A major development of the past year has brought the concept of a National Council on Social Science Data Archives to a point where the formal launching of such a council may be expected this fall. A series of meetings with representatives of major social science archives in the United States resulted recently in the appointment of an interim committee which drew up a Constitution and Bylaws for the organization. Election of a regular committee and appointment of officers should take place in September.

This welcome development is of major importance to the Consortium because it promises a division of labor in making the full range of social science data fully available to members of the academic community, both here and abroad. On the one hand, the improved ability to transfer data among archives permits the Consortium to maintain its focus on political materials and to implement established criteria for controlled archival growth. At the same time Consortium participants will have markedly improved access to data collected in other archives.

Agreement to participate in the formation of an archival organization bound to the principles articulated in the Constitution was a serious and potentially threatening step for some of the archives. The Roper Center, for example, was properly concerned that Consortium members might seek to obtain Roper materials only through the Consortium and thereby avoid the payments necessary to the economic well-being of the Roper Center. Given the relatively well-defined interests and limited commissions of each of the participating archives, it seems unlikely that any one of them, including the Consortium, would wish to take advantage of the situation by absorbing a major part of the Roper collection. Nevertheless, it is clear that by inadvertence it might occur that the most valuable of the Roper materials would be widely distributed through other archives, leaving the Roper Center the expensive and less rewarding task of managing data that are in less demand.

A basic problem shared by all of the archives, including the Consortium Data Repository, lies in their universal lack of sustaining institutional support. At present, archives survive on grants and on charges for services. The Consortium was created on the theory that a new form of organization (new to the social sciences, at least) could solve the problem by having many institutions share in the support of resource development and maintenance. Thus far our expectations have been met, but only because of substantial funding by grants for developmental work.

Expansion of Archival Holdings (continued)

We are optimistic, with reason but not with certain assurance, that increased capitalization of our efforts -- as through the acquisition of a computer -- will permit us to be sustained over the long haul by the broad base of shared inter-university support. The major threat to this aspiration is posed by the rapid, seemingly exponential, rise of demand for service. A continuation of the recent rate of increase would force new thinking about problems of finance. The Roper Center, faced with similar if not more severe problems, subsequently followed our lead and established a membership organization to help defray the costs of its services. Given their new policies concerning acquisition and rediffusion of data in cooperation with the other archives, we all have increased reason to want to see them establish a viable base for continued service to the academic community. It is difficult to predict the number of membership organizations that can be sustained in the mode of the Consortium. Nevertheless, it now seems clear that wherever colleagues anticipate a continuing use of an archive's resources, they should move vigorously to secure their institution's cooperation in supporting the archive. More broadly, prudential regard for shared values and enlightened self-interest both argue that major archival resources should be supported more generously than short-run cost-accounting considerations usually permit. This is an argument difficult to convey to budget officers but one that must be made if the impending crisis in archival growth is to be overcome.

New Data Collections

The concern for inter-archival cooperation does not provide a total response to Consortium participants' demand for additional data. One major line of archival growth is reflected in the NSF grants for 1965-67 and in the 'Prospectus for Consortium Development.' Beyond this ambitious program, however, lies the possibility of adding other data collections, particularly major survey collections. Future research needs should be anticipated and recommendations for data acquisition given to the staff. Budgetary provision can be made for a substantial amount of work in the next year; prompt replies to this invitation will assist Council and staff in planning next year's activities.

PROPOSED INTERIM CONSTITUTION OF THE

NATIONAL COUNCIL OF SOCIAL SCIENCE DATA ARCHIVES

Drafted by the Interim Executive Committee on April 3, 1965

PREAMBLE

Recognizing

- That existing quantitative social science data can be used for purposes in addition to those for which they were initially collected,
- that scholars should have ready and equal access to such materials.
- that social scientists will be best served if they are informed regarding the characteristics of the materials available to them, and
- that existing materials will be valuable resources to future scholars,

it is considered appropriate and desirable for social science data archives to cooperate with each other in an association which will seek to coordinate data-acquisitioning activities; set standards for processing, documenting, and storing data; work toward developing procedures for servicing user needs; disseminate information pertaining to the operations of archives; and help to secure the funds to accomplish these tasks.

PRINCIPLES OF COOPERATION

- 1. A Council. An association, to be called the National Council of Social Science Data Archives, shall be created.
- 2. Eligibility. Social science data archives of various kinds (including, but not limited to, archives which offer a wide variety of data and services; archives which specialize in acquisitioning particular kinds of materials or materials from specified geographical locations; archives which serve a regional clientele, a clientele with specific substantive interests, or a clientele limited primarily to the members of a single university; and other kinds of archives as well) shall all be eligible for Archive membership upon accepting the Council's Constitution and upon receiving approval by the Annual Meeting.

- 3. <u>Guidelines</u>. Archive members shall strive to meet the standards established by the Council in such matters as acquisitioning materials; preparing such materials for machine processing; documenting such materials; and providing other archives as well as their own users with appropriate kinds of information and assistance.
- 4. Exchange of Information. To facilitate individual and interarchival operations and planning, Archives shall undertake to keep the Executive Director informed with regard to changes in scope, operations, and focus of acquisitioning activities; information storage and retrieval, computer programming pertaining to archive operations, and other technical matters relevant to the operations of archives; and actual holdings of data, as well as general plans to acquire new bodies of data. The Executive Director shall, in turn, forward this information to all members.
- 5. Acquisitioning of Data. Archives shall work together to effect an optimum division of labor regarding the acquisitioning of data.

Archives shall not seek exclusive arrangements with datasuppliers such that other archives and users are prohibited from obtaining materials of these suppliers.

6. Rediffusion of Data. Recognizing that data-suppliers or their clients may wish to place limitations on the distribution of their materials, Archives will undertake to categorize their materials according to their availability for rediffusion, as defined by data-suppliers.

Archives shall seek to obtain data from data-suppliers on terms which minimize supplier-limitations on rediffusion.

Archives shall strive to avoid imposing restrictions on the rediffusion of materials other than those which may be imposed by the original suppliers.

- 7. <u>Costs</u>. Archives shall strive to charge no more than direct costs for preparing and transferring materials among themselves and to users.
- 8. The Council is empowered to advise but not to require changes in the policies and activities of its members.

PROPOSED BY-LAWS OF THE NATIONAL COUNCIL OF

SOCIAL SCIENCE DATA ARCHIVES

Drafted by the Interim Executive Committee on April 3, 1965

ARTICLE T

MEMBERS

Section 1. Membership. Only non-profit organizations, or departments or divisions thereof, or government departments, divisions, agencies or instrumentalities thereof, are eligible for Archive membership if, in the opinion of the Annual or Special Meetings, such membership is consistent with the objectives of the Council.

Section 2. <u>Determination of Membership Status</u>. The Executive Committee may grant provisional membership status, subject to ratification by a majority of the members.

The Executive Committee may provisionally withdraw membership status, subject to ratification by a majority of members.

Section 3. Membership Fees and Annual Dues. Initial membership fees, if any, and annual dues, if any, shall be fixed from time to time by the Annual Meeting. Although the Annual Meeting may increase or decrease membership fees and annual dues from time to time, all members of the same class shall be treated equally with respect to membership fees and dues except that the first year's dues may be prorated in the case of any member becoming such after the beginning of a membership year. No increase in membership fees or dues shall be retroactive.

Section 4. Resignation of Members. Any member may resign at any time by giving written notice to the Executive Director. Such resignation shall take effect at the time of the receipt of such notice or at any later time specified therein; and unless specified therein the acceptance of such resignation shall not be necessary to make it effective. When a resignation of a member is effective, the member shall be relieved from liability for dues for any year after the year in which the resignation is effective.

Section 5. Members Not to Attempt to Represent the Council. No member shall attempt to represent the Council whether in making any statements for publication or otherwise, unless the Executive Committee shall, by resolution, have specifically approved the action of such member.

ARTICLE II

MEETINGS OF MEMBERS, VOTING RIGHTS

- Section 1. Annual Meeting. There shall be an Annual Meeting of members of the Council, to be held at a time and place designated by the members of the Executive Committee, for the election of executive committeemen and for the transaction of such other business as may come before the meeting.
- Section 2. Special Meetings. Special meetings of the National Council, to be held at a time and place designated by the Executive Committee may be called at any time by the Executive Committee or by petition of one-third of the members.
- Section 3. Notice of Meetings. Written notice of every meeting of members of the Council shall be given by the Executive Director to each member at least fifteen days prior to the day named for the meeting. Such notice shall specify the general nature of the business to be transacted.
- Section 4. Quorum of Members. No Annual or special meeting of the members shall be organized unless a quorum is present. The presence, through representatives designated in accordance with the provisions of Section 9 of this Article II, of a majority of the voting members shall constitute a quorum.
- Section 5. Organization of Meetings. At every meeting of the members, the Chairman of the Executive Committee, or in his absence, a chairman chosen by vote of the members present, shall act as chairman.
- Section 6. <u>Voting Rights</u>. Except as provided in Section 8 of this Article II, each voting member shall have the right to one vote on each matter coming before a meeting of members.
- Section 7. Required Votes. Except as otherwise specified in the By-Laws, each matter shall be decided by the vote of a majority of the voting members actually voting upon such matter at a meeting at which a quorum shall be present, even where such majority be less than a majority of all the voting members who might have voted upon such matter.
- Section 8. <u>Cumulative Voting</u>. In all elections for Committeemen, each voting member shall have a number of votes equal to the total number of committeemen to be elected in the same election. A member is allowed to cast no more than one vote for a single candidate for a specific office.
- Section 9. Representation at Meetings: Voting by Mail. Since none of the voting members will be individuals, each voting member will

be entitled to be represented at each meeting of members by an individual to be designated by it in a written proxy or to be designated by it by such other method as may from time to time be determined by the Executive Committee. Unless otherwise specified in these By-Laws, the Executive Committee may determine in advance of any meeting that voting by mail shall be permitted; in such case, votes cast by mail shall not be counted for the purpose of determining whether a quorum is present, but shall be counted for other purposes.

ARTICLE III

EXECUTIVE COMMITTEE

- Section 1. <u>General Powers</u>. The property, affairs, and business of the National Council of Social Science Data Archives shall be managed by the Executive Committee between meetings of the Council.
- Section 2. <u>Number</u>, <u>Election</u>, and <u>Terms of Office</u>. At every other Annual Meeting, Archives shall elect a chairman and other members to the Executive Committee. The size of the committee shall be determined by the vote of the Annual Meeting.
- Section 3. Resignations. Any committeeman of the Committee may resign at any time by giving written notice to the Executive Director. Such resignation shall take effect at the date of the receipt of such notice or at any later time specified therein and unless otherwise specified therein the acceptance of such resignation shall not be necessary to make it effective.
- Section 4. <u>Meetings</u>. Meetings of the Executive Committee shall be held at such place and time as shall be designated from time to time by standing resolution of the Executive Committee. At such meetings the Executive Committee may transact such business as may be brought before the meetings.
- Section 5. Notice of Meetings. Notice of each meeting of the Executive Committee, stating the day, hour, and place, and the general nature of the business to be transacted thereat, shall be given by the Executive Director to each Archive member of the National Council either orally or in writing at least 7 days before such meeting.
- Section 6. <u>Quorum</u>. A majority of the committeemen in office or their duly designated proxies shall be necessary to constitute a quorum for the transaction of business.
- Section 7. Standing Committees. The Executive Committee may create such standing committees as it considers necessary.

Section 8. Expenses and Remuneration. Committeemen shall receive no remuneration as such, but may be reimbursed for out-of-pocket expenses incurred in carrying out their duties, including expenses incurred in traveling to and from the place of each meeting of the Executive Committee or of any committee appointed by the Committee or the Council.

Section 9. <u>Non-Members and Sustaining Members</u>. The Executive Committee is empowered to invite non-members of the Council to attend and participate in duly-authorized meetings, projects, and activities of the Council.

The Executive Committee is empowered to develop procedures by which data-suppliers, universities and colleges, government agencies, individuals, and others may affiliate themselves as (non-voting) sustaining members of the National Council. Such procedures shall be subject to approval by the Annual Meeting.

ARTICLE IV

OFFICERS

Section 1. Executive Director. The Executive Director shall be appointed by the Executive Committee, subject to approval of the Annual Meeting.

The Executive Director's office shall perform such functions as are assigned to it by the Executive Committee, the Annual Meeting, and by duly-authorized standing committees. These functions may include the preparation and distribution to members of materials pertaining to clearinghouse functions; fiscal management of Council resources; preparation of Council proposals, or program execution of other tasks pertaining to archival matters; and, representation of the Council's relations with relevant professional, national, and international bodies.

ARTICLE V

AMENDMENTS

Section 1. <u>Authority</u>. The Annual Meetings and special meetings shall have sole authority to amend the Constitution and By-Laws. These decisions can be made by two-thirds of the members.

Section 2. <u>Notification</u>. Proposed amendments to the Constitution as well as decisions to grant or withdraw membership status, must be presented to members at least forty days prior to Annual Meetings or special meetings convened to consider said issues.

III. STAFF COMPOSITION

Regular Staff, 1965-66

Executive Director - Warren E. Miller Associate Director - Philip E. Converse Associate Director - Donald E. Stokes Administrative Assistant - Ann Robinson Secretary - Grace Dunmore Secretary - Maureen Kozumplik

Director of Technical Services - Ralph L. Bisco Assistant Director of Technical Services - Gregory Marks Secretary - Carolyn Geda Clerk-typist - Karen Doehrman Study Processor, Supervisor - Henry Kerr Study Processor - Neil Kettlewell Data Processor, Supervisor - Todd Lane Data Processor - Harold Dode

Repository Development Staff

Director of Data Recovery - Howard W. Allen
Assistant to the Director of Data Recovery - Ronald Formisano
Programmer - Janice Plotkin
Programmer - Donna Busfield
Programmer - Martin Barrett
Secretary - Patricia Cartwright
Keypunch Supervisor - Linda Huggins
Keypunch Staff Denise Skalmowski
Carol Damroze

Carol Damroze
Sandy Lanphear
Judy Falarski
Nancy Gale
Marlene Parmeter
Lois Owens

Summer Staff, 1965

Teaching Staff: Research Design and Data Analysis

Professor Philip E. Converse Professor Donald E. Stokes

Dr. Aage Clausen Mr. Gregory Marks Mr. Merrill Shanks

Seminar on Community Power Structures

Professor William H. Flanigan Professor M. Kent Jennings Professor Harry M. Scoble

Seminar on Historical Analysis

Professor Samuel P. Hays Professor Lee Benson Professor Warren E. Miller Professor Murray Murphey Professor Waldo Tobler

Administrative Staff: Donald E. Stokes
Ann Robinson
Grace Dunmore

IV. BUDGETS

REVISED BUDGETS 1964-65 (Tentative)

	Operating Budget	Repository Budget
Professional and Administrative Staff		
Staff Salaries Communications & Supplies Council and Annual Meetings	\$ 32,000	\$ 16,000
	8,000	
Data Repository		
Preparation & Processing of Data Conferences	9,000	117,600 9,300
Technical Service to Participants	23,500	
Administrative Salaries Machine Rental & Supplies Staff Salaries		
Memoranda and Reports to Participants	2,000	
Summer Program		
Staff Salaries Supplies & Data Teaching Salaries Subsidies]- 15,000 8,500 13,500	
	\$111,500	\$142,900
Funds		
Members (39) Surplus University of Michigan National Science Foundation Social Science Research Council	\$ 95,500 (2,500) 8,500	\$142,900
	\$101,500	\$142,900
Net Deficit	\$ 10,000	-0-

PROPOSED BUDGETS 1965-66

	Operating Budget	Repository Budget
Professional and Administrative Staff		
Staff Salaries Communications & Supplies Council and Annual Meetings	\$ 39,500 10,800 9,000	\$ 33,200 22,700
Data Repository		
Preparation & Processing of Data Conferences	12,700	124,100
Technical Service to Participants		
Administrative Salaries	19,000	
Machine Rental & Supplies	10,500	
Staff Salaries	20,500	
Memoranda and Reports to Participants	3,000	
Summer Program		
Staff Salaries	8,000	
Supplies & Data	12,000	
Teaching Salaries	20,000	
Subsidies	55,000	
	\$220	<u>\$180,000</u>
Funds		
Members (52)	\$125,000	
University of Michigan	15,500	
Social Science Research Council	5,000	
National Science Foundation	74,000	\$375,000
	\$21	9,500 \$375,000
Net Surplus for 1966-67	(\$	\$195,000

COMBINED BUDGETS 1963-1966

	1963-64	1964-65 (tentative)	1965-66 (proposed)		
Professional and Administrative Staff					
Staff Salaries Communications & Supplies Council and Annual Meetings] \$ 40,000 7,000]- \$ 48,000 8,000	\$ 73,000 33,000 9,000		
Data Repository					
Preparation & Processing of Data Conferences	65,000 4,000	127,000 9,000	127,000 -0-		
Technical Service to Participants					
Administrative Salaries Machine Rental & Supplies Staff Salaries	25,000 *]- 24,000 *	19,000 10,000 21,000		
Memoranda and Reports to Participant	ts 4,000	2,000	3,000		
Summer Program					
Staff Salaries Supplies & Data Teaching Salaries Subsidies	15,000 6,000 13,000 \$179,000]- 15,000 8,000 14,000 \$254,000	8,000 12,000 20,000 55,000 \$390,000		
Deficit from Last Year	4,000	3,000	10,000		
	\$183,000	\$257,000	\$400,000		
Funds					
Members University of Michigan Social Science Research Council National Science Foundation	79,000 6,000 3,000 95,000	95,500 8,500 143,000	125,000 16,000 5,000 254,000		
Total	\$183,000	\$247,000	\$400,000		

^{*}Staff Salaries included in top line