URBAN POLICY ANALYSIS: AN INSTITUTIONAL APPROACH

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DRAFT

For review & revision only–NOT for quotation

Note to the Reader:

As part of the AAAS Chautauqua program, I was asked last year to prepare a "Study Guide" for use by the participants in my 1974-75 Chautauqua course. A Test Edition of this Study Guide was sent out to a number of readers. The Study Guide was to be revised during the summer of 1975 and published by AAAS during the fall of 1975. The attached represents my efforts to revise the Study Guide. I plan to submit a final draft to AAAS in September. I would appreciate comments and criticisms. My thanks to Jnana Hodson for his valuable editorial assistance and to those who read the Test Edition and offered many good suggestions.

8-7-75

AUTHOR'S PREFACE

This study guide draws upon a group of materials prepared for the 1973-74 NSF Chautauqua-Type Short Course Program. I have benefited greatly from the comments made by reviewers of a Test Edition of the Study Guide issued by AAAS last year.

The study guide would not have been possible without the support of the Center for the Studies of Metropolitan Problems at the National Institute of Mental Health (Grant Number 5 R01 MH 19911). Much of the research reported on was supported by NIMH. In addition, the National Science Foundation has also provided essential research support in the form of Grant Numbers GS 27383 and GI 43949.

Many staff members of the Workshop in Political Theory and Policy Analysis have at various times provided key assistance on the various editions of these materials. They include: Marsha Brown, Judy Clark, Debbie Gray, Jnana Hodson, James McDavid, John McIver and MaryJo Wagner.

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PART ONE - TEXT

CHAPTER I

STARTING POINT

The term "study guide" is indefinite enough to require an explanation of who might find this volume useful and why.

This study guide draws upon a large notebook of materials I originally prepared for the 1973-74 National Science Foundation Chautauqua-Type Short Course program for college teachers. I filled that notebook with materials college teachers could use in courses on public policy analysis, urban politics, and social sciences methodology.

During the summer of 1974, I was asked by the American Association for the Advancement of Science to prepare a study guide from the materials contained in the large notebook. This volume was then issued as a test edition and used in conjunction with the Chautauqua course I taught during the 1974-75 academic year. The comments of a number of readers of that edition have been helpful in substantially revising the study guide for the current version.

A variety of individuals may find this guide useful. The guide could be used as the textbook for a section of a course on urban politics, metropolitan government, public policy analysis, or social science methodology. The guide could be used for an independent readings course by an advanced undergraduate or entering graduate student. The guide might also be useful to a group of citizens appointed to a local government study commission who wish to do some basic readings before undertaking their own study in their own community.

The monograph Understanding Urban Government: Metropolitan Reform Reconsidered by Robert L. Bish and Vincent Ostrom (Washington: American Enterprise Institute, 1973) makes an excellent companion volume to the study quide for courses focused primarily on urban politics, urban economics, or metropolitan government. Vincent Ostrom's The Intellectual Crisis in American Public Administration (University, Alabama: University of Alabama Press, rev. ed., 1974) is an appropriate companion volume for courses in public administration or in philosophy of the social sciences.

This guide attempts to explain and illustrate a particular approach to public policy analysis -- that of institutional analysis. As such, it takes a somewhat radical -- and somewhat old-fashioned -- position toward the study of public policy. It is radical in that it challenges many accepted dogmas. It is old-fashioned in that it adopts a position similar to that adopted by 18th century scholars and activists.

Institutional analysis can be defined as the examination of the direct and indirect effects of establishing or changing particular sets of decision rules about how public decisions will be made. Closely related to the concept of institutional analysis is the process of institutional design. Institutional design occurs when we use our knowledge -- however limited -- of the likely effects of adopting or changing decision rules for making collective decisions, to design institutional arrangements for solving some problems. Politicians and citizen groups are frequently involved in the process of institutional design.

Anyone engaged in institutional analysis or design assumes that institutional variables -- different types of decision rules -- may make a difference in the kinds of public policies adopted. Some of the more recent empirical scholars of public policy have interpreted

their findings to show that "political" variables do not make much difference in public policy outputs. Consequently, students may find an approach which focuses on political decision rules somewhat puzzling at first. This will particularly be the case if they have just finished a course which reviews some of the recent empirical work described as public policy analysis.

Be forewarned. Do not read any further if what you want from this volume is a broad overview of the current mainstream approach to public policy analysis. You will be disappointed. No attempt is made to provide a broad summarization of current approaches so that a student receives a "well-rounded" view of different ways of doing public policy analysis. Rather, I pursue one approach I feel is very important. I try to explain this approach and illustrate how it is applied to a particular area of public policy analysis -- metropolitan governance. A number of general textbooks on public policy analysis are currently in print. Students and faculty interested in a general overview are referred to the list of books on this topic at the end of the Readings Section for this chapter.

Why do I think it important to pursue this "radical" and "old-fashioned" approach to public policy analysis? Crucial issues are involved in many of the proposals for reform of urban, state, and national institutions currently being considered on the American political scene. Each year a large number of study groups and commissions are formed to examine the structure of local, state, and national governmental institutions. Each year proposals are made and fervently pressed to make this or that change in the decision rules of various governmental entities. Increase the size of local city governments!

Steamline the administration of state governments! Eliminate the overlapping authority of federal agencies! End the duplication of local public service agencies! All are proposals to change institutional arrangements. Proponents for all of them argue that our general well-being will be improved by the successful adoption of reform.

In reading through the myriad of reports and recommendations, one finds almost no evidence cited for the promised benefits the proposed reform is supposed to bring. An accepted body of traditional wisdom forms the basis for much of the deliberations concerning proposed reforms. Although the bulk of the traditional wisdom has been subjected to little or no theoretical or empirical analysis, few participants have questioned it. Few doubts about its warrantability have been entertained. Belief in the traditional wisdom has remained strong. Major structural reforms based on the traditional wisdom are proposed because there is a strong presumption among those making the proposals that benefits will result.

But if changes in the organization of governmental agencies will in fact make no difference, then a very large amount of effort is being expended on useless changes. Social scientists have an obligation, I feel, to provide relatively good evidence concerning the likely effects of different changes in the way governmental agencies are organized. If no changes are likely, we can then advise public officials and citizens that they are wasting their time trying to change a particular type of rule. If positive benefits are likely, then we can make our studies available as evidence for likely improvement if specified changes are made. On the other hand, if negative effects are likely, we may help public officials and citizens keep from making things worse.

But for all the focus on institutional change and reform in the everyday political world, there is little focus on the study of institutional arrangements in modern social science. Institutional analysis can be thought of as the "underdeveloped area of public policy analysis."

We do not know as much about the effects of different types of institutional reforms as those who propose them would lead us to believe. If our knowledge is incomplete -- or wrong -- then major structural reforms could lead to more harm than good. For those concerned about human welfare, learning about institutional analysis may enable them to participate more constructively in efforts to improve the welfare of people.

Now that the focus of this study guide has been stated, let me state its major purposes. The first intent is to describe an evolving method of institutional analysis. With this method, practitioners and scholars will not be dependent upon the dogma of traditional wisdom but will instead be able to delineate and examine the propositional structures underlying <u>various</u> proposals for institutional reform. Where alternative reforms are simultaneously proposed to solve similar problems, different underlying theoretical structures should also exist. By specifying the underlying theoretical structures, we can ascertain exactly where the theories diverge. Research can be undertaken at such "crucial junctures" where competing theories of institutional reform predict diverse consequences.

Consequently, much of this study guide is devoted to explaining how to derive propositions from reform literature and array them into logical structures. We shall examine competing structures to determine where they diverge. We shall discuss how to design research

to examine such competing theories of reform. Research thus becomes an essential part of institutional analysis and design. It helps to establish or negate the empirical warrantability of one or another theory of institutional reform.

The second purpose of this study guide is to illustrate aspects of the approach to institutional analysis I describe. Since institutional analysis can be applied at all levels of government and for private as well as public decision-making arrangements, the illustrations could come from a diverse range of applications. But the illustrations here all focus on the substantive area of metropolitan reform -- the area with which I am most familiar and am thus most able to provide illustrations. In addition, by focusing on one problem area, the approach may perhaps be better illustrated.

A third aim is to provide some insight about the substance of metropolitan reform itself. It is hoped that a reader will carry away some knowledge of the type of propositions involved in different kinds of proposals for metropolitan reform and have some feeling about the evidence for at least a few of these propositions.

In this approach, research also becomes a vital part of teaching. Students and teachers can jointly plan and execute relatively small-scale research projects to help provide evidence about the consequences of different forms of institutional analysis and design. A second intent of this study guide, then, is to describe how small-scale research projects can be tied into teaching efforts.

The fourth goal -- the most important -- is to encourage readers to engage in institutional analysis themselves. So much remains to be done! While the approach can be described and aspects can be

illustrated, the full methodology of institutional analysis and design is not yet completed. Further contributions can be made in many ways. Throughout the guide, suggestions will be made for projects you could do to add to our understanding.

Assignment

Before turning to Chapter II, read the short section of Readings for Chapter I located in the second half of the study guide. It is a chapter from a report entitled Governmental Functions and Processes: Local and Areawide issued by the Advisory Commission on Intergovernmental Relations in Washington in February 1974.

In this chapter, ACIR reviews some of the proposals for alternative governmental structures for governing metropolitan areas. The issue of how to best govern metropolitan areas has been of considerable importance to ACIR through the years.

While this overview of different proposals is short, it should provide you with at least a foundation for understanding the issues involved in considering different forms of institutional arrangements for governing metropolitan areas.

CHAPTER II

DEVELOPING A METHOD OF INSTITUTIONAL ANALYSIS

While we have advanced considerably in the last few years in developing a body of knowledge relevant for considering the issues posed by ACIR in the chapter you have just completed, we have a long way to go. Advocates of one or the other structure of local government have little in the way of firm evidence upon which to base some of their recommendations for reform.

A major intention of this study guide is to describe a method of institutional analysis that is still in the process of evolution. An underlying assumption of this method is that social science should provide useful information to those trying to solve problems in the on-going political world. One of the major problems public officials and citizens encounter at all levels of political life is how to organize governmental entities to achieve preferred consequences. This is the problem of institutional design or how to build institutional arrangements that produce the results people want.

The approach taken here is that in evaluating institutional designs one must attempt to understand and elucidate the theoretical framework underlying a reform proposal. This is not always easy to do. The logic of a reform may not be well specified by those making a recommendation. But one can begin by converting the language of reform proponents into propositional form. One can then attempt to link these propositions into as logical form as possible. This will show whether

the underlying framework does indeed have a consistent logical argument. If it doesn't, one should seriously question the value of the proposed reforms. If there is logical coherence, then one can begin to juxtapose alternative theoretical explanations and attempt to design empirical studies that examine propositions from one or another theory.

The reliability of any problem-solving effort depends upon the body of knowledge and supporting evidence used to identify the cause-and-effect relationships underlying the analysis. Theory is simply the use of elemental terms and postulated relationships to think through complex workings that are not intuitively obvious. The average citizen does not think of himself or herself as a political theorist. Yet, the same person uses concepts or ideas in interpreting the news found in the newspaper or viewed on television. The citizen assumes that the President's decision to impound funds, a mayor's decision to establish little city halls, and a legislature's decision to consolidate city and county governments will make some differences, and that the citizen can distinguish between rhetorical promises and the realities that will be experienced. It is a rare person who simply absorbs what is read or heard without reinterpreting it, questioning its credibility, or inferring conclusions that were not directly presented to him. All of these processes involve the use of theory -- theory not formally stated, perhaps not even logically integrated -- but theory as a "way of looking at the world" and drawing conclusions from bits and pieces of scattered and unrelated visual or audio messages.

Any effort to improve the functioning of governments in metropolitan areas should be self-conscious in its use of a theoretical framework for

analyzing problems and reaching conclusions. This is particularly important for research efforts. Without the self-conscious development of theory, the collection of empirical data cannot serve as evidence and contribute to a cumulative knowledge of the relationship between conditions and consequences in metropolitan government. When we use inferential reasoning to derive conclusions and formulate hypotheses, antecedent conditions can be viewed as independent or intervening variables and consequences can be treated as dependent variables. Empirical research can provide evidence for either supporting or rejecting the association among variables derived from a theoretical framework. Where a theoretical explanation is consistently supported by evidence, we can begin to have confidence in its warrantability.

Explanatory theory can, in turn, be used as a tool to diagnose the association between conditions and consequences in problematic situations judged as harmful or pathological. If those conditions can be identified, theory provides a method for arraying alternative conditions and for evoking different consequences. A choice of alternative courses of action thus becomes available to decision makers. Choice from among alternative possibilities characterizes policy decisions. Theory, if supported by empirical research, can provide a critical basis for policy analysis.

We are, of course, a long way from having a theoretically sound and empirically supported basis for policy analysis. But there are a number of steps that can be undertaken to contribute to the eventual development of such a theory of institutional design. These steps can be considered a method of institutional analysis leading to the development of a theory of institutionsl design. The steps are:

1. Converting the statements justifying institutional designs into propositions that assert specified relationships among variables.

2. Attempting to array propositions into logical forms or theories.

3. Arraying ~~diverse~~ competing theories so that the major similarities and differences between the theories are made explicit.

4. Developing clear, operational definitions for the major terms used in diverse theories.

5. Undertaking research where data can be used as evidence to test the warrantability of competing theories.

These steps are similar to those discussed in the philosophy of science literature as crucial testing or the method of multiple working hypotheses. This scientific tradition stresses the need to array alternative theories as fully as possible. In this manner, one can begin to assess where different theories predict different results. It is at such junctures that empirical research plays its most effective role by simultaneously reducing the warrantability of one theory and increasing that of another. In the relatively "soft" social sciences, we will probably never be able to conduct "the" crucial experiment that destroys with one blow an entire theoretical structure and provides strong support for another. Rather, we shall probably have to pick away at a series of interrelated studies which have a cumulative impact. If the studies are theoretically linked and have consistent results, then, over time, we may be able to determine which theories have the highest levels of warrantability. With warrantable theories, policy analysts can then more accurately predict the likely consequences to flow from the reform of current institutional arrangements.

Assignment

Read the two selections for this chapter in the Readings section of this guide. The first is a reprint of a recent re-issue of an article written by T. C. Chamberlin in 1890 on "The Method of Multiple Working Hypotheses." This article stresses the need for keeping more than a single hypothesis in mind when designing or evaluating any research. Chamberlin argues that the posing of several working hypotheses reduces the probability that a ruling theory will linger on after evidence is accumulated which constitutes an empirical challenge.

The other selection is a more recent article by John R. Platt on "Strong Inference." In addition to the derivation of alternative hypotheses, Platt urges that research be conducted where evidence will simultaneously provide evidence about more than one hypothesis. Platt is particularly concerned about designing research which can negate at least one out of a set of alternative hypotheses.

CHAPTER III

ILLUSTRATING A METHOD OF INSTITUTIONAL ANALYSIS

Developing a theory of institutional design represents an ambitious undertaking. Time and the efforts of many individuals are required. Some preliminary steps of applying this method to metropolitan reform are presented in this study guide to illustrate the method. You as a reader should be encouraged to join the effort pursuing this mode of analysis as we develop a policy science that can address itself to the fundamental issues of institutional analysis and design. While the focus here is on urban problems, the method can be applied to national and international problems.

Deriving Propositions

The first step in this method of institutional analysis is the conversion of statements justifying new institutional proposals or reforms into propositions. A proposition is basically a statement which posits a relationship among variables. Variables are attributes of events in the world which have at least two values. One example of a variable involved in many propositions about the effects of institutional arrangements is "size of governmental unit." The size of a governmental unit is an attribute of that unit -- something which we can use to describe that unit. "Size of governmental unit" has at least two values. We can speak in the simplest terms of large or small governmental units. But we can also conceptualize this variable as

having many values ranging from very small to very large with many values in between. We can, for example, measure the size of governmental units in terms of population, area, numbers of public employees, budget, or volume of goods provided.

The process of deriving propositions from the language of those proposing new or reformed ways of organizing joint decision-making may be illustrated as follows. Figure 1 is a reproduction of four pages from a small brochure prepared by the Committee for Consolidation -- a group of proponents of a consolidation measure placed before the voters in Portland and Multnomah County, Oregon, in the spring of 1974. In the brochure, the proponents argue:

- Consolidation will save you money.
- Consolidation will eliminate waste and inefficiency.
- Consolidation will give you more responsive local government.
- Consolidation will give you open and honest government.

Each of these statements can be thought of as the basis for a proposition. To convert these statements into propositions, we need to identify the variables in each statement. One variable used in each of the statements in the Portland brochure is "consolidation." (In simplest terms, the two values required of a variable would be "consolidated" and "not consolidated.") As used in these statements, consolidation can be thought of as the "independent" variable. It is the variable proponents are urging be changed from the value "not consolidated" to the value "consolidated." This variable might be more clearly stated as "consolidation of governmental units."

Each statement posits a different effect of consolidation. Each of these effects can be thought of as a relationship between consolidation

and a dependent variable. In the first statement, the terms "will save you money" need to be converted into more general terms that can be conceptualized as a posited relationship with a variable. Since the brochure stresses savings to taxpayers, one way to state the dependent variable would be in terms of "per capita tax revenues." The dependent variables in the other three statements can be stated in language very close to the original.

Finally, the relationships between independent and dependent variables should be stated as propositions. Since those proposing reforms feel that a change in institutional arrangements will cause a change in some dependent variable, we shall first convert these statements into propositions which take the form of "if, then" sentences. Most generally, such statements can be written "if A, then B" which is equivalent to "if A occurs, then B will occur." The four statements in the Portland brochure could be stated in the following ways:

- If consolidation of governmental units occurs, then lower per capita tax revenue will occur.
- If consolidation of governmental units occurs, then greater local governmental efficiency will occur.
- If consolidation of governmental units occurs, then more responsive local government will occur.
- If consolidation of governmental units occur, then more open and honest government will occur.

Statements in this form enable us to see more clearly the relationships posed and to begin to think about how one might be able to evaluate the reform proposals empirically.

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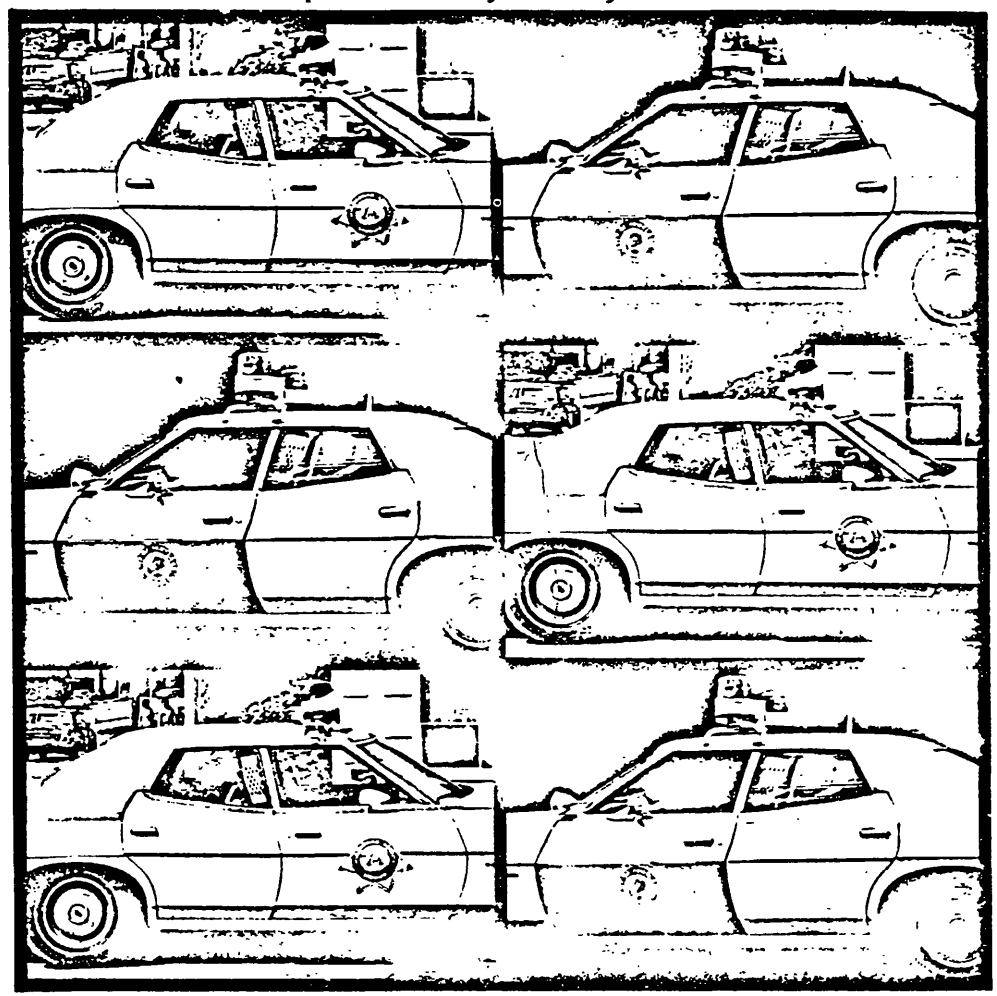
Consolidation will eliminate waste and inefficiency.

Currently City residents are paying taxes for two sets of overlapping governments that deliver only one set of services. That means waste and inefficiency in the way your tax dollar is spent. *Why pay for both police and sheriff departments, for two maintenance shops, for two park bureaus, for two planning bureaus, for two public works shops?* This kind of senseless duplication costs you money. Consolidation will eliminate this waste and inefficiency and provide you better service for your tax dollars.

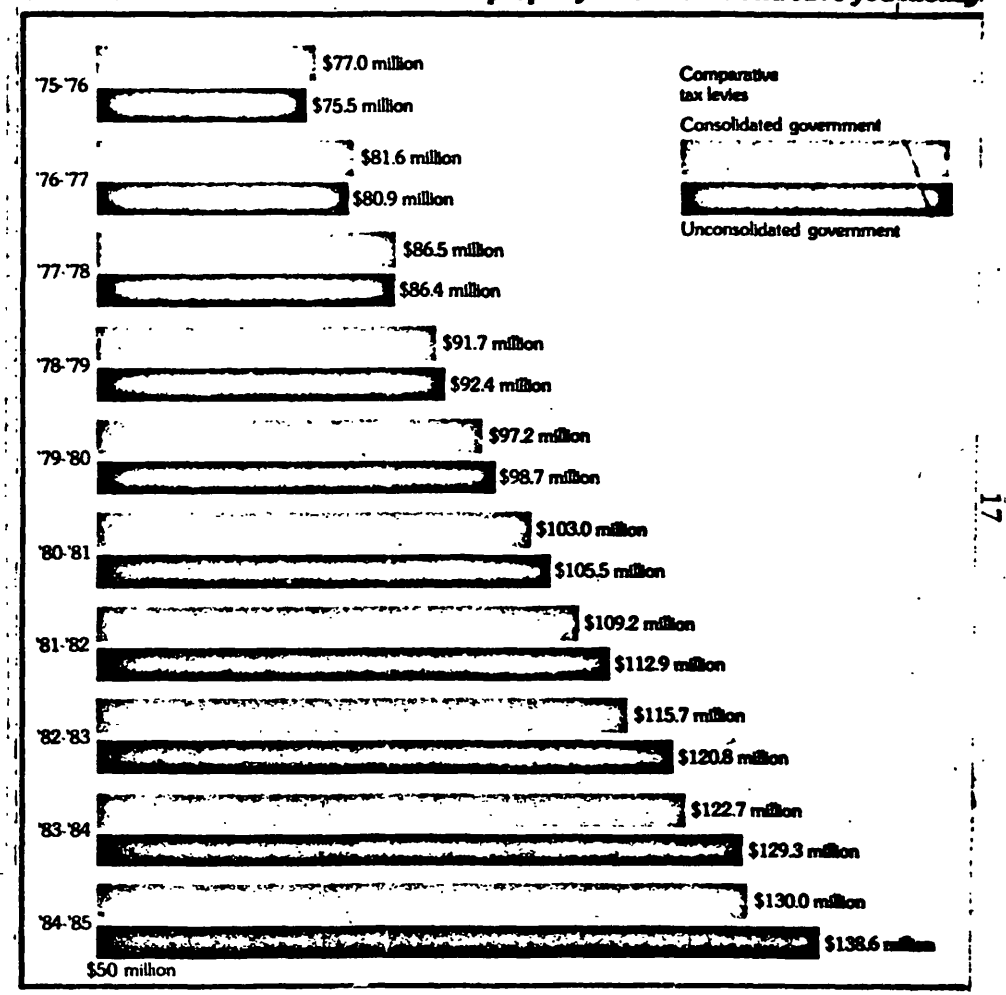
This kind of senseless duplication costs you money.



Consolidation will save you money.

Consolidation will eliminate costly duplications and mean more efficient use of your tax dollars. The result: An actual savings to you. Currently, inflation reduces the buying power of your tax dollar by about 10%. *City and County governments have three choices: raise taxes, cut services, or consolidate for efficiencies.* Consolidation has saved taxpayers money in 14 other communities nation-wide as it has with our own court consolidation. It stands to reason that paying for 48 different governmental units costs you more money than paying for one.

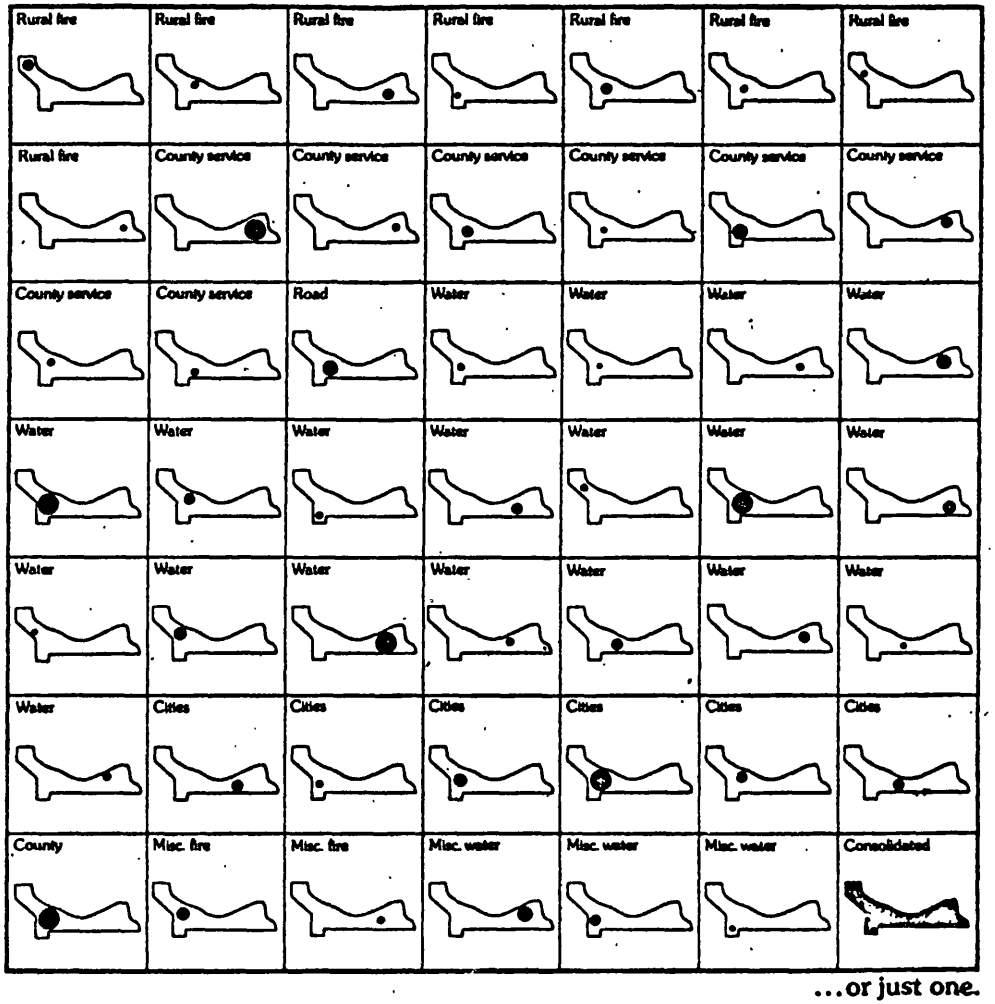
Consolidation will slow down the rate of property tax increase and save you money.



Consolidation will give you more responsive local government.

Have you ever had a complaint and tried to find the right City or County office to call? Say the problem is with litter in a neighbor's yard, or you want a stop sign for your street. Do you call the City Neighborhood Environment Bureau or the County Health Department? Is it a County road or a City street? *With two governments, chances are all you get is the run-around. Consolidation will solve that problem.* One government will mean that you will know who is responsible for delivering services, for more responsive local government.

Forty-eight separate governmental units...



...or just one.

Consolidation will give you open and honest government.

Compare the charters. Which charter provides that councillors who are paid a full-time salary actually have full-time duties? Which charter requires full financial disclosure by elected officials? *Which charter establishes district elections to cut the cost of campaigns, so the average citizen can afford to serve?* Which charter limits the terms of office of elected officials? Which charter requires circulation of ordinances and agendas in a newspaper which comes to your door? *The consolidated charter.* Neither of the current charters offers this opportunity for citizens to take control of their own government.

Consolidation has a broad base of support.

Consolidation has always been favored by citizens who believe that it makes good sense. Thousands of volunteers who are concerned about better government are working for consolidation. The Committee for Consolidation is made up of the following individuals:

Co-Chairpersons
Joe Edgar
Elaine Cogan
John Gray

Finance Chairman
John Piacentini

Rep. Earl Blumenauer
Jane Cease
Rep. Lloyd Kirksey
Frank Roberts
Ruth Hagenstein
George Joseph
Loyal Lang
Joseph Labadie
Lou Perry
Hardy Myers
Rick Gustafson
Mort Winkel
Herb & Mary Park
Rep. Howard Willits
Rep. Keith Skelton
Rep. Mary Rieke
Rep. Vera Katz
Sen. Keith Burns
Grant Nelson
George Casterline
Polly Casterline
Sed Stuart
Hon. Terry Schrunk
Rep. Steve Kafoury
Ted Crissell
Marlene Bayless
Tom Walsh
Rep. Bill McCoy
Alcena Boozer
Allison Belcher
Caryl Waters
John Platt
Comm. Ben Padrow
Comm. Don Clark
Mayor Neil Goldschmidt
Lloyd Anderson
Comm. Mildred Schwab
Harold Hirsch
Rep. Howard Willits
George Sheldon
Charles Crews
John Toran
Al Lewis
R. P. "Joe" Smith
Leonard Gionet
Forrest Jenkins
Blanche Schroeder
Ronald Buel
Mike Powers
Hollis Ransom
David McCammon
Claudia Powers
Laurie Robbins
Sen. Ted Hallock
Don Tate
Nancy Stevens
Barbara Sanders
Steve Roso
Sharon Roso
Norm Henwood
Peg Henwood
Herman Brame
Phil McLaurin
Mr. & Mrs. Ron Kawamoto

Assignment

The small campaign brochure written by proponents of consolidation in Portland presents only a few of the arguments made in support of consolidation. The literature supporting consolidation as a major answer to the problems of governing metropolitan areas is extensive. Another growing literature has recommended decentralization or community control as an alternative reform of local government in metropolitan areas.

The first two selections in the Readings section for Chapter III illustrate the first step of institutional analysis by presenting two propositional inventories. I prepared the first for the 1973-74 NSF Chautauqua Type Short Course Program. A participant in that program, Michael P. Smith of Tulane University, then prepared a propositional inventory on the community control literature. The second selection is a revision of his project.

Both of these propositional inventories are incomplete. Both can be expanded considerably. You may want to begin your own efforts in institutional analysis by adding propositions to either or both of these inventories. The numbering system is designed so that adding propositions is quite easy. Or, you may want to start your own institutional analysis by taking another literature recommending urban reform. A similar propositional inventory could be developed for the literature recommending "two-tier forms of local government" or for the polycentric public choice literature. If you area of interest is in state, national, or international studies, you could begin by arraying a propositional inventory of an appropriate literature.

Linking Propositions Into Logical Structures

Your next step in institutional analysis is to examine the propositions and the text from which they were derived for explicit or implicit linkages. One consequence is frequently predicted to result from a particular type of institutional arrangement because other types of consequences are also predicted. Some of the dependent variables of the simple propositions may themselves be independent variables in other propositions. Thus, the variable which operates in some propositions as a dependent variable and in others as an independent variable is

really being presented as an <u>intervening</u> variable in a set of related propositions.

We can use the propositions derived from the Portland brochure to illustrate a simple linking. In the brochure and similar documents, it is argued that having more than one government leads to more than one agency providing the same type of services and to smaller units of government. The presence of more than one agency is considered wasteful and inefficient. Large units are considered more efficient than the small.

A linked set of propositions stating the "mini" logic underlying this argument would be:

By definition or empirical?? JPMT

- If consolidation of governmental units occurs, then the number of similar agencies serving a metropolitan area is reduced.
- If consolidation of governmental units occurs, then the size of governmental agencies providing services will be larger.
- If the number of similar agencies serving a metropolitan area is reduced, governmental efficiency will be increased.
- If the size of governmental agencies is increased, governmental efficiency will be increased.
- If governmental efficiency is increased, per capita tax revenues will be decreased.

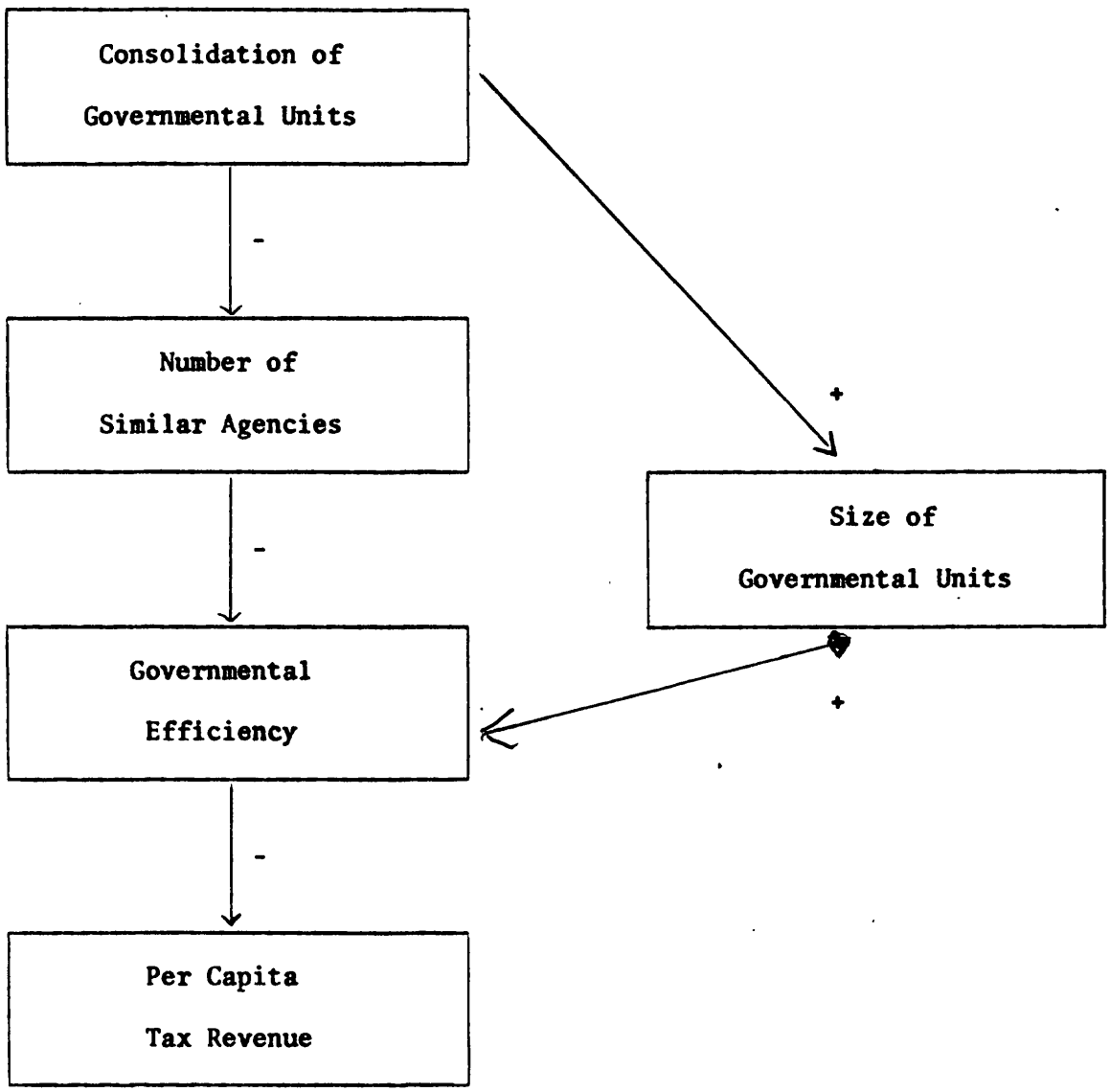
  Therefore:

  If consolidation of governmental units occurs, per capita tax revenues will be decreased.

This same set of propositions can be represented by a flowchart as illustrated in Figure 2. The boxes in the chart represent variables. The arrows represent the existence of a posited relationship. The signs specify the direction of the relationship.

Figure 2

Flowchart Showing Linkages Between Consolidation and Per Capita Tax Revenues As Posited in Traditional Reform Literature



Diagramming the posited linkages between variables in a logic underlying particular recommendations for institutional arrangements is a helpful process. You will frequently be able to recapitulate a rather complex argument on a single page of paper. This enables you to do several things. First, it enables you to more easily check the logical consistency of the argument. You will at times find that while statements are found in the literature supporting a particular institutional arrangement, other arguments and their implications run contrary to the originally stated argument. A consistent logical structure underlying proposals for creating institutional arrangements of a particular type seems a minimal requisite for accepting the argument on face value.

Second, using the flowchart method for linking propositions will help you to see implications that may not easily appear when you are working through rather complex arguments in a text. You can use the "sign rule" for specifying the direction of a relationship between two variables that are not directly connected in the flowchart but are linked through intervening variables. Thus, the full implications of a theoretical structure may be worked out even though some of the implications are not specified in the original text. The sign rule can be stated in the following way:

1. If all the signs on links between two variables are positive, the relationship between the variables is positive.

2. If all the signs on links between two variables are negative, the sign of the relationship between the two variables depends on whether there is an even or odd number of links between the variables.

    a. If the number of links is even, the sign of the relationship is positive.

    b. If the number of links is odd, the sign of the relationship is negative.

odd or even.

3. If the signs on the links between two variables are mixed, the sign of the relationship depends on whether the number of negative signs is ~~positive or negative~~. The rule is then the same as that stated under 2 above.

The relationship between consolidation of government units and per capita tax revenues in Figure 2 is thus negative because all linkages in one chain between these two variables are negative and the number of such linkages is odd. In the second chain are two positive and one negative relationship -- again leading to a negative relationship for the linkage.

It should immediately be pointed out that this rule for deriving the sign of a linked relationship can be used without question only for determinant logics. All of the propositions as stated above assume a causal and determinant linkage between the independent and dependent variables. Much of the reform literature from which these propositions are derived assumes such causal linkages. But given the indeterminant nature of the social world, few determinant relationships exist between institutional variables and dependent variables such as efficiency and per capita revenues. As reform proponents become more conscious of the multiple factors that affect efficiency, equity, costs, and similar variables, propositions are stated more in the language of association than in the determinant manner.

The language of association assumes that some relationship exists between two or more variables, but that it is not necessarily invariate or strong. The propositions in the linkage presented above could be restated in the language of association as follows:

- Consolidation of governmental units is negatively associated with the number of similar agencies serving a metropolitan area.

- Consolidation of governmental units is positively associated with the size of governmental agencies providing services.

- The number of similar agencies serving a metropolitan area is negatively associated with government efficiency.
- Size of governmental agencies is positively associated with governmental efficiency.
- Government efficiency is negatively related to per capita tax revenues.

Therefore:

- Consolidation of governmental units is negatively associated with per capita tax revenues.

This statement probably better reflects the intention of the proponents of reform. Few would argue that a determinant relationship between consolidation and per capita tax revenue exists.

Further, a much broader set of research designs can be used to empirically examine propositions stated in associational language, in contrast to those stated in determinant language. But with associational language the problem of deriving propositions down the chain of linked propositions becomes more difficult. Whether the posited direction of a derived hypothesis is negative, positive, or non-existent, for example, depends not only on the number of links and their signs, but also on the strength of the relationships. If all relationships are posited to be strong and the number of separate linkages is relatively small, the chain rule can still be used. But if the strength of the relationship posited between variables is weak or the number of links is large, the chain rule may lead to false predictions. A derived relationship may, for example, be either non-existent <u>or</u> of the opposite sign.

For "mini" logics such as Figure 2 where the relationships among variables are assumed to be relatively strong, where an underlying causal but not necessarily determinant relationship is assumed, and where the number of links is relatively small, it is still appropriate and useful to array the set of propositions in a logical format. In

developing longer chains of relationships, we should be especially careful where we suspect that reform proponents would not be willing to posit strong relationships among variables down the chain. Long chains of relatively weak relationships between institutional changes and dependent variables should lead us to be skeptical of the likelihood that the institutional variable may have much impact at all. If an institutional change has only a slim chance of producing predicted consequences, the change may not be worth the cost.

Comparing Diverse Theoretical Structures

If you summarize the posited relationships between variables in a flowchart to show the logic underlying a type of reform proposal (as we have already done), you will then find it much easier to compare the logics underlying different types of proposals. You can then see where different variables are included in a logic, where variables are linked differently, and/or where the sign of a posited relationship differs.

Assignment

Read the third selection in the Readings section for Chapter III. This is an article I wrote several years ago comparing a portion of the theoretical structure derived from the traditional consolidation literature to that of a political economy or public choice literature.

You will note one major difference in comparing the propositions and flowcharts derived from these two traditions. A variable related to the type of public good or service is present in a key position in the propositions derived from the work of political economists, but is absent in the traditional consolidation literature. Thus, the proponents

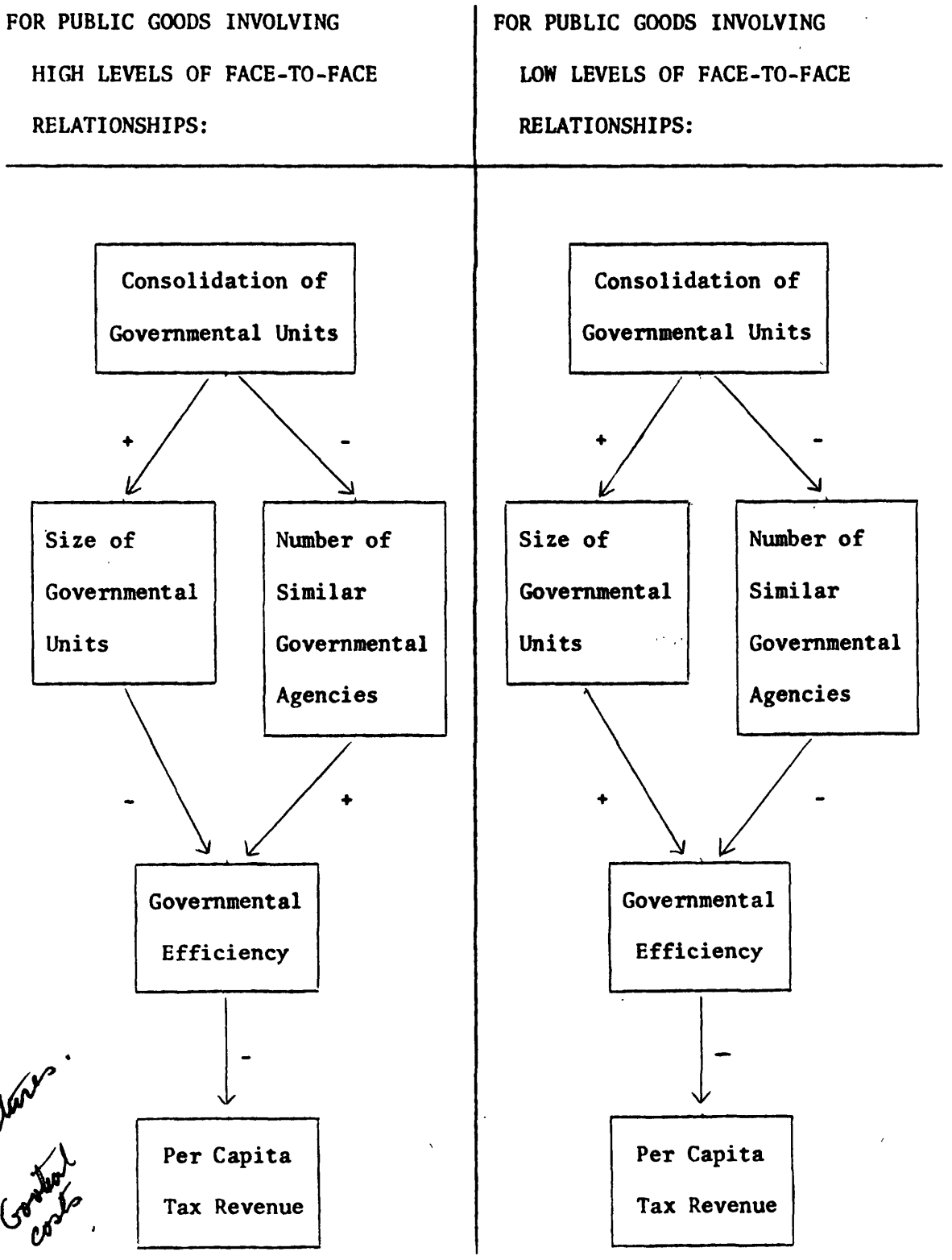
of consolidation in Portland do not distinguish between the types of services to be consolidated. A public choice theorist would have recommended in the Portland case that serious consideration be given to consolidation of some services or service areas such as those involving heavy capital expenditures and little face-to-face contact between public officials and citizens. But the same theorist would not recommend consolidation for such services as police, education, and others involving a high involvement of public employees in the actual delivery of the service.

The flowchart representing the comparable logic of a public choice theorist for the variables presented in the Portland brochure is illustrated in Figure 3. As you see, one half of the flowchart is identical to that present in Figure 2 derived from the traditional consolidation literature. In the other half -- for public goods and services involving high levels of "face-to-face" relationships -- the signs on two arrows are reversed, leading in both cases to opposite conclusions from the "mini" logic. Thus, the proponents of simple consolidation would argue that regardless of the type of public good or service, a larger number of similar and smaller agencies reduces governmental efficiency. Public choice proponents, on the other hand, would argue that for services such as police and education, a larger number of similar and smaller agencies increases governmental efficiency (at least within some range).

By comparing the two traditions in this manner, we isolate where they differ. Now, we can design research to specifically examine these differences. Chapter IV of this study guide will summarize a series of research projects which have attempted to do just that.

Figure 3

Flowchart Showing Linkages Between Consolidation and Per Capita Tax Revenues as Posited in Public Choice Literature



Control expenditures.

Control costs.

Developing Operational Definitions for Major Terms

But before we can undertake research to examine key propositions from multiple theoretical foundations, we must define key terms. Many of the concepts used by proponents of one or another reform are left ambiguous for the purpose of convincing as large an audience as possible. Such a strategy is useful to those trying to win elections. But when we are trying to establish the basis for designing future institutions, we should not want to leave terms ambiguous. Our aim should be to delineate and define key variables in a clear and operational manner. This is essential in the design of a research project. It is essential in the re-analysis of others' data. It is essential for a cumulative development of research findings on the same issues.

In your readings, you have already come across several discussions of this problem. In both propositional inventories, the problems of definitions are discussed and clarified. In the reading you have just completed, "efficiency" is mentioned at the end of the article as a term which may be defined differently by proponents of different reforms. There is an additional reading in this section which turns specifically to the problem of defining key terms.

Assignment

Read the last reading in the section of Readings for Chapter III. The article discusses the need to define and operationally measure the structure of interorganizational arrangements. Many references are made to terms such as "multiplicity" and "fragmentation." But few serious efforts have been made to reach operational definitions of these terms. This article is an attempt to start that process. You may be able to improve upon it.

Designing Research to Test the Warrantability of Competing Theories

The design of research is one of the truly creative aspects of social science research. Many choices are involved in the design of a good study. How you choose determines the strength of the evidence concerning the warrantability of a contested proposition. There are many ways of undertaking the design process. There is no "correct" way to do so. Nevertheless, I have tried to outline some simple steps that you might take in moving from a proposition through the design phase of a project. The steps include the following:

1. Take a general proposition apart and identify each variable in it.
2. For each variable, determine what unit of analysis is involved.
3. Examine the relationship posited in the proposition and determine whether it is possible to examine the relationship as stated -- restate if necessary.
4. For each general unit of analysis, assign a specific universe of units to which your particular study will be related.
5. Develop a sampling frame for the units identified.
6. Develop operational measures for each variable.
7. List rival hypotheses that might explain the data you will be examining.
8. Plan methods for examining alternative hypotheses and for eliminating irrelevant ones.
9. Select the appropriate modes of data analysis.

JPMcD
U of A not clear is it the same as a variable, or not? Consistent with an hypothesis?

To illustrate this process, let us take two propositions from the sample inventory -- Size-D_{30} and Frag-D_{80} -- and sketch in the steps.

Size-D_{30}: Size of jurisdiction is positively associated with citizens' satisfactions with governmental services.

Frag-D_{80}: Fragmentation is positively associated with higher per capita costs for providing governmental services.

Step One: Take a general proposition apart and identify each variable in it.

Size-D_{30}: V_1 - Size of jurisdiction.

V_2 - Citizens' satisfactions.

V_3 - Governmental services.

Frag-D_{80}: V_1 - Fragmentation.

V_2 - Higher per capita costs.

V_3 - Governmental services.

Step Two: For each variable determine what unit of analysis is involved.

Size-D_{30}: V_1 - Jurisdictions are the units of analysis.

V_2 - Individual citizens are the units of analysis. Citizens living in at least two jurisdictions will need to be included.

V_3 - The services provided by the jurisdictions are the units of analysis.

Frag-D_{80}: V_1 - Regions (metropolitan area, rural area, natural resource area) which can be well specified are the units of analysis. At least two regions will need to be included.

V_2 - Per capita costs of jurisdictions within the regions defined in V_1 are the units of analysis.

V_3 - Services provided by the jurisdictions within the region are the units of analysis.

Step Three: **Examine the relationship posited in the proposition and determine whether it is possible to examine the relationship as stated -- restate if necessary.**

Size-D_{30}: The relationship stated is "positively associated." Any cross-sectional design would enable one to examine this type of relationship. An over-time design would also be appropriate.

Frag-D_{80}: The relationship stated is "results in." A cross-sectional design would not enable one to examine this type of relationship. If a cross-sectional design is the only feasible design, given other constraints, then the proposition would need to be restated somewhat like the following:

> Fragmentation is positively associated with higher per capita costs for providing governmental services.

But an "over-time" design in which the level of fragmentation in some region or regions increased might enable one to examine the original relationship. A more conservative restatement of the proposition for an over-time design would be:

> An increase in fragmentation is positively associated with an increase in the per capita costs for providing governmental services.

Step Four: **For each general unit of analysis, assign a specific universe of units to which your particular study will be related.**

Size-D_{30}: V_1 - For size of jurisdiction you will need to determine which universe you want to examine. You might select at a minimum two jurisdictions of varying

size. You might select all of the jurisdictions in a metropolitan area or in a state or in the country. Or, you might select one jurisdiction which has changed in size over time (better yet, you might select in addition a second jurisdiction similar to the first which has not changed in size over time).

V_2 - For citizens' satisfactions you will need to determine specifically which citizens you want to include -- all over a certain age? All voters? All residents?

V_3 - For governmental services you will need to specify exactly which services you will ask citizens to rate -- all governmental services provided by the jurisdictions included? A set of services provided by one agency?

Frag-D_{80}: V_1 - For fragmentation you will need to select at a minimum two regions of varying fragmentation or one region which has changed in degree of fragmentation over time (again, it would strengthen the design to select a second matched region which did not change).

V_2 - For per capita costs you will need to select which type of costs will be included and over what time period.

V_3 - For governmental services you will need to specify exactly which services, similar to Size D_{-30}.

Step Five: Develop a sampling frame for the units identified.

Size-D_{30}: V_1 - If you have selected two jurisdictions as your universe, you will have no sampling problems for this variable. But if you have chosen a larger universe (for example, all cities within a state or metropolitan region), efficiency and financial considerations will probably require the development of a careful sampling method from that larger universe.

V_2 - Unless all jurisdictions are extremely small (and then your variation on the size dimension would not be very great) you will need to develop a sampling frame for the citizens in each jurisdiction.

V_3 - You will probably make an arbitrary decision as to which services to include. Selecting services randomly would not enable you to generalize back to all services provided since services differ from each other significantly.

Frag-D_{80}: V_1 - If you have selected two regions as your universe, you will have no sampling problems for this variable. But if you have chosen a larger universe (for instance, all metropolitan regions in the U.S., all river basin drainage areas) efficiency and financial considerations will probably lead you to develop a careful sampling method from that larger universe.

V_2 - Cost data are probably not so extensive that you would need to develop a sampling method.

V_3 - Same as V_3 for Size-D_{30}.

<u>Step Six</u>: <u>Develop operational measures for each variable</u>.

Size-D_{30}: V_1 - As we noted earlier, the size of a jurisdiction may mean any of several definitions:

1. The geographic extent of a jurisdiction.
2. The population of a jurisdiction.
3. The size of the operating unit itself measured by the number of employees or the size of the budget.
4. The scale of the unit producing services measured by the number of units of output produced.

You may decide that you wish to use multiple methods for operationalizing this concept and include several of the above measures.

V_2 - You will probably need several questions on a survey instrument to operationalize this variable.

V_3 - Each of the questions used to operationalize V_2 will need to clearly relate to the specific governmental services chosen to be included in the study.

Frag-D_{80}: V_1 - As noted in your readings for this chapter, "fragmentation" refers to the number of units which exist contiguously and for the most part do not overlap. But you will need to determine a method to count the units in an area. This may sound silly until you try to make a definite determination of exactly how many units of a

particular type exist in a specific region. Do not expect Census of Government figures to agree with the figures gathered by other methods.

V_2 and V_3 - You will need to specify exactly which costs and documents are to be located. For the costs of police services, for example, you will need to specify whether police pensions, which are seldom in the official police budget, will be included as costs. If you want to measure the costs of providing general governmental services, you will need to carefully specify the full range of included and excluded costs. If reporting systems differ among jurisdictions -- and they usually do -- you will need to be extremely careful in specifying how this variable is to be measured.

Step Seven: List rival hypotheses that might explain the data you will be examining.

Size-D_{30}: Some of the rival hypotheses would include these:

1. Age is negatively associated with citizens' satisfactions with governmental services and the age distribution differs between jurisdictions.
2. Wealth is positively associated with citizens' satisfactions and the wealth distribution differs between jurisdictions.
3. Previous unpleasant experiences with public officials is negatively associated with citizens' satisfactions with governmental services and the

distribution of unpleasant experiences differs between jurisdictions.

4. Parochialism is positively associated with citizens' satisfactions and the distribution of parochialism differs between jurisdictions.

Frag-D_{80}: Some of the rival hypotheses would include these:

1. Density of population is positively associated with higher per capita costs for providing governmental services and the density distribution differs between regions.
2. Quality (or quantity) of output is positively associated with higher per capita costs for providing governmental services, and the distribution of quality (or quantity) differs between regions.
3. Wealth of the community is positively associated with higher per capita costs for providing governmental services and the distribution of community wealth differs between regions.

Step Eight: Plan methods for examining rival hypotheses or for eliminating irrelevant ones.

Size D_{-30}: You should gather information on as many of the variables included in the rival hypotheses as possible so that you can examine each rival during data analysis. You could also match areas so that they would be very similar in terms of some of the variables included in the rival hypotheses such as age, wealth, education, length of residence. If the matching were quite close,

differences in the satisfaction levels of citizens would not be attributable to those variables.

Frag-D_{80}: You would want to develop measures and gather data on as many of the variables included in the rival hypotheses as possible so that you could examine each rival during data analysis. It might be possible to match regions on such measures as density or wealth, but it would be extremely difficult to do so. A "most similar systems" design is not as appropriate for this proposition as it might be for Size-D_{30}.

Step Nine: Select the appropriate modes of data analysis.

For both propositions, you will need to examine the types of measures you will be able to obtain for each of the variables and in light of that determine which parametric or non-parametric modes of analysis will be most appropriate.

CHAPTER IV

APPLYING THE METHOD OF INSTITUTIONAL ANALYSIS

As you have seen in the previous chapter, one key difference between reforms based on consolidation and reforms derived from public choice theory is in the size -- and number -- of governmental units providing services such as police and education. In the field of education, for example, the belief that increases in school district size would lead to more effective, efficient, and equitable provision of education has led to a massive consolidation of school districts during the last two decades. In 1962, 34,678 independent school districts existed in the U.S. By 1972, only 17,238 school districts remained.

A similar belief that increasing the size of local police agencies will increase their effectiveness and efficiency has recently led several prestigious national and state commissions to recommend the elimination of all small police departments through widespread consolidation. Several excerpts from this literature are included in your readings.

Assignment

Read the two selections for Chapter IV in the Readings part of this study guide. The first is an excerpt from the President's Commission on Criminal Justice Standards and Goals. This commission recommended that all police departments of fewer than 10 officers be consolidated with neighboring departments. It further recommended serious consideration of additional types of consolidations.

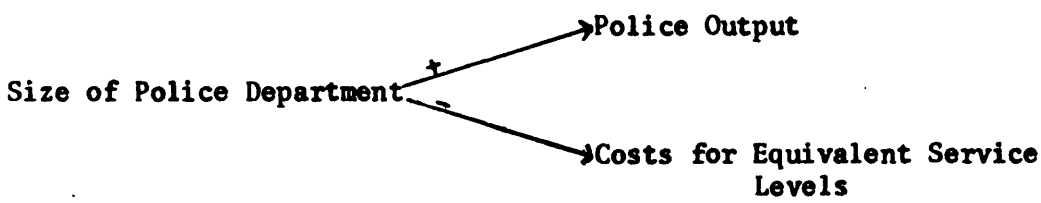
> Acting on the impetus set by the President's Commission, state-level criminal justice commissions have been established across the country to develop their own criminal justice standards and goals. The State of Michigan was one of the first to issue its final report. In the selection reproduced from this report, you will notice a logic that resembles the traditional metropolitan consolidation argument. This has led the commission to recommend the elimination in the state of Michigan of all police departments of fewer than 20 officers.

Underlying the recommendations for consolidation of urban police forces serving metropolitan areas is the assumption that larger police forces will provide higher levels of police services more efficiently than will smaller police departments.

But is that assumption warranted? To find out, we must apply the method of institutional analysis. We can begin by arraying the assumption as a simple theoretical model of predicted relationships, as we have done in Figure 1.

Figure 1

Theoretical Consolidation Model
(Simplified Form)

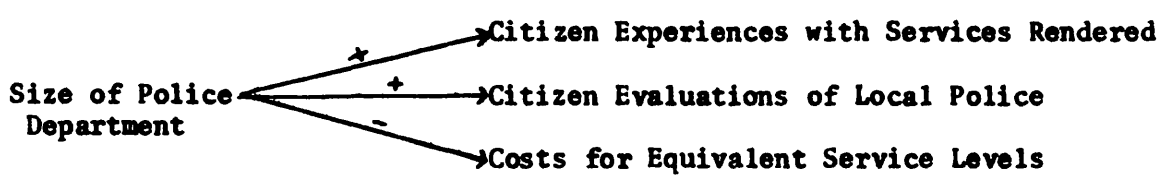


We could examine this model directly <u>if</u> an accepted method of <u>measuring</u> police outputs existed and if all police outputs were the same. But such conditions do not exist.[1]

Faced with the difficulties arising from the lack of absolute measures of police outputs, researchers at the Workshop in Political Theory and Policy Analysis at Indiana University decided to test the simple theoretical consolidation model by using a set of operational measures of police outputs. These measures were selected by first narrowing the range of police services examined to those provided at the neighborhood level. These services included all direct responses to calls for assistance, criminal investigation, general patrol, and related supportative services such as dispatching. By focusing on the neighborhood level, the researchers hoped to examine whether the scale -of-economy and improved performance commonly assumed by consolidation proponents could, in fact, be found. Services such as metropolitan traffic patrol were excluded because their appropriate level of measurement is quite different from measures of neighborhood-level police services. Survey instruments were designed to obtain two types of information about police output at this level. The first asked respondents about their direct experiences with police and with criminal victimization. The second asked respondents to evaluate their local police on a number of attributes. Thus, the theoretical model presented in Figure 1 was translated into an operational model for testing, illustrated by Figure 2.

Figure 2

Operational Consolidation Model
(Simplified Form)



In this model, one would expect to find the following types of relationships between citizen experiences and services rendered:

H_1 Compared to citizens living in neighborhoods served by small police departments, citizens living in neighborhoods served by large police departments should:

- Report fewer victimizations;
- Report victimizations to the police at a higher rate if they occur;
- Receive higher levels of police follow-up to a victimization;
- Call upon police for assistance more often;
- Receive more rapid response to their calls for assistance; and
- Receive more satisfactory levels of police assistance.

On citizen evaluations of local police, one would expect to find the following types of relationships:

H_2 Compared to citizens living in neighborhoods served by small departments, citizens living in neighborhoods served by large departments should more frequently:

- Rate the job being done by police as outstanding;
- Rate police-community relationships as good;
- Indicate that police do not take bribes;
- Indicate that crime is about the same or decreasing;
- Indicate that police respond very rapidly; and
- Agree that local police treat all equally.

In regard to costs, the following relationship would be expected:

H_3 The costs of providing similar levels of police service should be lower in larger jurisdictions than in smaller jurisdictions.

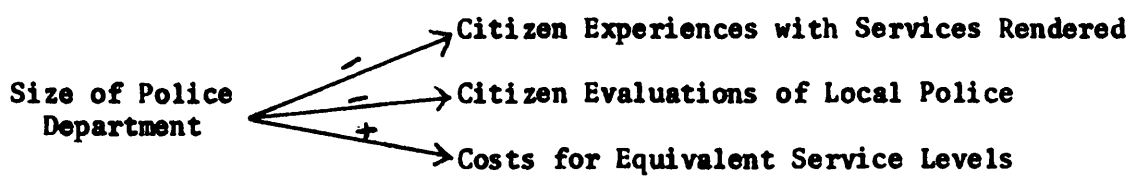
All dependent variables in H_1,H_2, and H_3 are jointly referred to as performance variables.

There is, of course, an alternative to this operational consolidation model -- one derived from a public choice perspective. The alternative

model would posit exactly the opposite signs for each arrow as shown in Figure 3. Consequently, empirical examination of this set of relationships would provide simultaneous evidence about the warrantability of two models -- the simplified consolidation model posited in Figure 2 as well as an alternative simple model presented in Figure 3.

Figure 3

Alternative Operational Model
(Simplified Form)



An alternative set of hypotheses to those previously stated exists but is not presented here to avoid the repetitious nature of such a listing.[2] For each of three hypotheses, the alternative hypotheses posit the opposite direction.

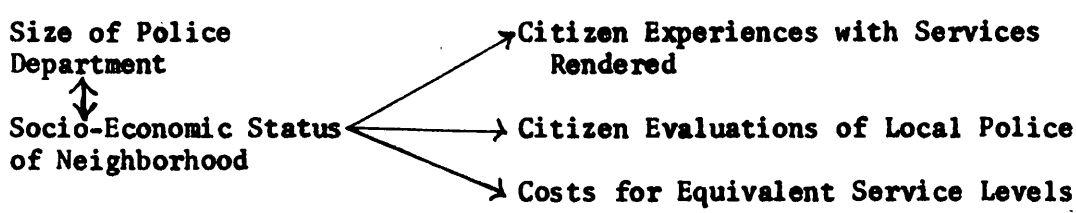
Empirical Studies

The theoretical and operational models examined in these studies take the size of a police department serving a neighborhood as the independent variable. But other variables could also affect citizen experiences, citizen evaluations, and the costs of equivalent service levels. In particular, research efforts have identified a number of socio-economic variables such as the patterns of wealth, density, education, race, and age among neighborhood residents that may affect costs, experiences, and evaluations.[3] Any research examining the effects of police

department size on performance variables must take into account the potential effects of such socio-economic variables. Research designs ignoring the potential influence of such variables would be seriously vulnerable to criticism. In this case, there would be the danger that variations in neighborhood socio-economic conditions, rather than in the size of the police department serving a neighborhood, would be affecting citizen experiences, citizen evaluations, and costs of services. In essence, a rival methodological model posits that any effect of size upon performance variables results from variation in socio-economic status of the neighborhoods included in the study rather than from variation in size.[4] Such a methodological model is shown in Figure 4.

Figure 4

A Rival Methodological Model



To take this rival methodological model into account, research on the effects of size must control for the socio-economic variables either by carefully selecting research sites to minimize the differences in socio-economic conditions among the sample areas selected or by including a sufficient number of sample areas in the study to permit handling of the potential effects of socio-economic conditions at the data analysis stage through statistical controls.

In the first four studies discussed in this chapter, a "most-similar systems" research design was used to control for the potential

effects of socio-economic variables. A most-similar systems research design requires that all other factors that might affect dependent variables be neutralized by selecting study areas matched on all relevant factors except for the independent variables under examination. Thus, in the four studies here, neighborhoods were matched in terms of socio-economic variables such as racial characteristics, density, age distributions, and wealth. In each study, some of the matched neighborhoods were served by relatively small, independent police departments, while others were served by large departments.

The first study examined three small independent communities immediately adjacent to three matched neighborhoods within the Indianapolis Police District. The independent communities were Speedway, Beech Grove, and Lawrence and had populations of 12,000 to 16,000. They were served by police forces composed of 18 to 25 sworn officers. Each of the three Indianapolis city neighborhoods was adjacent to one of the independent communities. The socio-economic characteristics, housing patterns, and living conditions of the six neighborhoods were closely matched. They were predominately white, middle-class residential districts with single-family residences. The Indianapolis neighborhoods were served by a highly professionalized city police force of some 1,100 sworn officers serving a total population of nearly 500,000. The Indianapolis Police Department had an excellent reputation as a competent, efficient, and innovative police agency. (Ostrom et al, 1973).

The data from the Indianapolis study did not support H_1 or H_2 from the simplified consolidation model. As shwon on Table I, citizen reports of experiences indicated that the large department did not

TABLE I

Comparison of Citizen Experiences and Citizen Evaluations in Indianapolis, Grand Rapids, Nashville and Chicago

	Indianapolis (White Residents)		Grand Rapids (White Residents)		Nashville (White Residents)		Chicago (Black Residents)	
	Indep. Community	City Nghbrhood	Indep. Community	City Nghbrhood	Indep. Community	City Nghbrhood	Indep. Community	City Nghbrhood
Experiences								
% Not Victimized	80% (373)	70% (349)	90% (516)	86% (563)	83% (106)	64% (98)	75% (195)	74% (276)
% Who Reported Victimizations	86% (73)	82% (103)	93% (74)	85% (57)	67% (18)	46% (35)	-	-
% Who Received High Follow-Up	47% (43)	36% (37)	80% (74)	66% (57)	-	-	59% (32)	46% (48)
% Who Called for Assistance	26% (336)	17% (311)	25% (568)	26% (554)	26% (106)	12% (98)	19% (193)	24% (269)
% Who Received Assistance 5 Min.	79% (71)	60% (45)	56% (142)	45% (122)	-	-	60% (30)	48% (44)
% Stopped	24% (325)	25% (325)	27% (557)	26% (559)	17% (105)	15% (98)	-	-
Evaluations								
% Rating Job Done - Outstanding	31% (369)	12% (330)	23% (557)	15% (559)	42% (106)	6% (98)	-	-
% Rating PCR - Good	94% (321)	82% (273)	97% (557)	93% (559)	67% (106)	43% (98)	46% (181)	44% (254)
% Police Do Not Take Bribes	86% (334)	85% (315)	95% (557)	92% (559)	-	-	37% (110)	21% (157)
% Crime About Same or Decreasing	77% (315)	60% (314)	79% (557)	57% (559)	57% (106)	62% (98)	-	-
% Rating Police Response V. Rapid	66% (323)	43% (276)	38% (557)	23% (559)	60% (106)	62% (98)	26% (144)	25% (197)
% Agree Police Treat All Equally	-	-	88% (557)	65% (559)	82% (106)	64% (98)	46% (105)	18% (181)

perform better than the small departments. Citizens in matched neighborhoods served by the large department did not rank the performance of their department better on any evaluation indicator than did citizens served by the small departments. Where differences in output levels appeared, the consistent pattern was that the small police department serving the independent communities produced at a higher level than the large department. Thus, the alternative hypotheses were supported.

Findings on H_3 were somewhat ambiguous. While per capita expenditures for the entire City of Indianapolis averaged $21.33, resources worth approximately $10.72 per capita were devoted to provide police services in the three Indianapolis Police District neighborhoods studied. Police expenditures in the independent communities averaged $12.76 per capita. Thus, the per capita cost of resources devoted to police services in the sample Indianapolis city neighborhoods were less than the per capita costs in the independent communities. This finding did not provide adequate evidence for any conclusion about the relative efficiency of the two types of departments since the residents of the smaller communities -- while effectively allocating more to police services -- were also receiving higher levels of service. Without an interval measure of output, no efficiency conclusion could be reached in this case.

Analysis of expenditure patterns in the two types of police departments did indicate some important differences in resource allocation. The small police departments allocated proportionately more of their police budget to patrol services. The Indianapolis department allocated proportionately more to detective and supervisory services. The

smaller communities thus appeared to devote proportionately more effort to crime prevention and immediate response activities, while the large department devoted more of its resources to investigate crime once it had occurred.

A replication of this study was undertaken in the spring of 1971 by Samir IsHak in the Grand Rapids, Michigan, metropolitan area. The independently incorporated cities of East Grand Rapids, Kentwood, and Walker, and three Grand Rapids city neighborhoods adjacent to them were selected for comparative study. The Grand Rapids population was approximately 200,000,while the independent communities ranged from approximately 12,000 to 20,000. The police departments serving these communities varied from nine to 17 sworn officers. Grand Rapids employed 313 sworn officers. The Grand Rapids neighborhoods were similar to each other and to those studied in Indianapolis (Ishak, 1972).

Data from this replication did not support either H_1 or H_2 of the consolidation model. The pattern of the two studies was remarkably similar, as shown in Table I. Based on citizen experiences and evaluations, one would have to conclude that the large department was <u>not</u> providing higher service levels. The findings regarding H_3, moreover, were more clear-cut than those in Indianapolis. The per capita expenditure of the City of Grand Rapids was $20.00. The per capita expenditures for police within the three separately incorporated communities ranged from $5.81 to $16.13. When one examines what the Grand Rapids Police Department devoted to police services in the neighborhoods studied, one finds they averaged $16.88 per capita, compared to an average of $10.62 for the three independent communities.

The large department thus provided lower levels of services at higher costs. Production strategies in Grand Rapids resembled those in Indianapolis.

A second replication of the Indianapolis study was undertaken in the spring of 1973 by Bruce D. Rogers and C. McCurdy Lipsey in Nashville-Davidson County. Within Davidson County were six incorporated communities that voted in 1962 against consolidating their governments with the urban services district of Nashville's metropolitan government. They were, however, part of the General Services District and thus paid for such county-wide services as the Nashville etropolitan Police Department. One of these communities, Berry Hill, was adjacent to the Urban Services District and to a closely matched neighborhood called Woodbine,which was served by the Nashville-Davidson County Metropolitan Police Department. Berry Hill provided its own police and park services and contracted for other municipal services, even though its 1970 population was only 1651. Both Berry Hill and Woodbine were working-class, predominantly white neighborhoods of single-family residences (Rogers and Lipsey, 1974).

The Nashville-Davidson County study did not support H_1 or H_2. In fact, the findings against H_1 and H_2 were even stronger than in the Indianapolis and Grand Rapids studies. Information regarding H_3 is not yet available.

A fourth study was conducted in Illinois. Two poor, black communities in south suburban Cook County, each served by its own police department, were compared to three relatively similar black neighborhoods within the City of Chicago. In this instance, the differences in resources allocated to the different types of neighborhoods

were extreme. Although more than 14 times more was spent per capita on police services in the Chicago neighborhoods than in either Phoenix or East Chicago Heights, the service levels as shown on Table I did not differ significantly between the two types of departments. Again, there was no support for H_1 or H_2. Because of the same levels of output and the drastically different levels of costs, the evidence is strongly against H_3 (Ostrom and Whitaker, 1974).

We have also reanalyzed data gathered by the National Opinion Research Center (NORC) for the President's Commission on Law Enforcement and Administration of Justice in 1966. This data base of approximately 2,000 respondents residing in 109 cities of more than 10,000 population provided data on citizen evaluations of their police, citizen feelings of safety, and their confidence in their police. We added information from the Municipal Year Book on city size and expenditure levels (Ostrom and Parks, 1973).

In general, examining the full set of respondents, we found consistently weak relationships between size of jurisdiction and general evaluations of police services. All significant relationships run counter to those predicted in the simplified consolidation model. Feelings of safety decrease with size; fear of break-in and attack increase with size; the rating of police honesty decreases with size. In regard to the cost of police services, we found a positive relationship between city size and per capita costs. We then controlled for the quality of services provided. If differences in quality of service were the explanation for the positive relationship between size and cost, the relationship would disappear or would change signs. There was virtually no change in the coefficients when quality levels were

controlled. Thus, there was no support for H_3 of the simplified consolidation model.

In this study of 109 cities we were also able to examine in an exploratory manner whether the negative relationship between city size and evaluation of police services was more curvilinear than linear. We did find that the relationship between size and evaluation levels was positive for suburban respondents living in cities under 20,000 and for central-city respondents living in cities under 100,000. Above these cutoff points, the direction of the relationship reversed. Thus, performance levels may be higher in medium-sized departments than in either small or large departments.

In summary, comparison of levels of services provided by large departments with small- to medium-sized departments for similar neighborhoods in each of the four separate studies shows a consistent finding that larger departments do <u>not</u> provide higher levels of services as measured by citizen experiences or evaluations. These findings are also substantiated in a nation-wide study of police services in 109 cities ranging in size from 10,000 to 7 million population. Two of the within-metropolitan area studies established that costs of police services to similar neighborhoods were higher in the larger jurisdictions. A third study had ambiguous findings regarding costs. The fourth study did not examine H_3. The nationwide study found higher per capita costs for providing constant levels of police services in larger police jurisdictions.

The cumulative impact on this series of studies should lead to a serious questioning of the empirical warrantability of the assumptions underlying the traditional metropolitan reform proposals as they relate

to the provision of police services in urban areas. If larger police departments do not provide higher output or similar levels of output more efficiently than smaller departments, there would be little reason to eliminate small department.

In each of the studies described above, only the simplified consolidation model and its alternate could be empirically examined. But given the consistent lack of empirical support for the simplified consolidation model, it became essential to delve more deeply into potentially more complex relationships between police department size and performance variables.

Proponents of consolidation often argue, for example, that only large departments can afford to provide extensive training for police personnel and to employ officers with college education. It is assumed that both higher levels of formal police training and general education lead to higher performance levels. But because of the lack of empirical evidence for these assumptions, it becomes important to trace out the effects of police department size upon levels of formal police training and college education. It is also important to examine the effects of formal police training and college education on the performance of police departments. These more complex relationships could not be examined in the earlier studies, but were a major research question in a much larger study we conducted in the St. Louis metropolitan area.

The St. Louis Comparative Study of Police Performance

The St. Louis metropolitan area was chosen because of its wide variety of local governmental structures.[4] The St. Louis City Police Department with 2,200 officers provided an example of a large, consolidated

force recommended by traditional reformers. The St. Louis County Police Department of 436 officers exemplified a large county-wide department capable of supplying a full complement of police services, supplementary services, or contract services to independent communities. Within St. Louis County were 93 independently incorporated communities, 63 of which had their own police departments ranging from no full-time officers (they employed only part-time officers) to 76 full-time officers. The remaining jurisdictions contracted for police services with either the County Police Department or other municipal departments. This variety of jurisdictions enabled us to examine the effects of police department size upon performance as well as many of the intervening variables that may affect police performance.

Research Design

Again, we used a "most-similar systems" research design to select neighborhoods within the St. Louis area. This time, however, we included more than one strata of similar neighborhoods. In this study, neighborhood was defined as:

- An independently incorporated community in St. Louis County with a 1970 population less than or equal to 28,900;
- A census tract within an independently incorporated community in St. Louis County with a 1970 population greater than 28,900;
- An urban place designated by the 1970 Census within the unincorporated portion of St. Louis County; or
- A Planning Neighborhood designated by the St. Louis City Planning Commission within the City of St. Louis.

Under these criteria, more than 170 neighborhoods existed in the City of St. Louis and St. Louis County.

Neighborhoods were eliminated from the sample frame where:

- The percentage of population over 65 years of age exceeded 20 percent;
- The percentage of population under 21 years of age exceeded 45 percent;
- The median value of owner-occupied housing was $25,000 or more; or
- Less than 60 percent of the dwelling units were owner-occupied (this criterion was relaxed slightly in two cases to allow inclusion of two predominantly black communities).

The remaining relatively homogeneous neighborhoods were then stratified along dimensions of neighborhood wealth, as well as by the size of police department (size of community initially stood as a proxy for size of department). The three strata of neighborhood wealth and seven strata of police department size produced a matrix of 21 cells. For seven of these logically possible cells, no existing cases met the previously-stated criteria for inclusion. From the 14 remaining cells, we chose 45 sample areas. In choosing from the potential neighborhoods for each cell, we first dichotomized these into neighborhoods with more than 30 percent black population in 1970 and those with less than or equal to 30 percent black population. Sensitivity to this dochotomy ensured -- to the extent allowed by the existence of appropriate neighborhoods -- that we would include a significant black sample.

Having determined neighborhoods of interest through use of the above criteria, we proceeded to choose among them on the basis of contiguity into clusters of neighborhoods. These considerations allowed us to choose sample areas that exhibited variation along the dimensions of both size and organization for provision of police service, of individual wealth within the community, and of the presence

or absence of a sizeable black population. Variation in other factors affecting police performance was controlled for by matching. For each neighborhood in our sample frame, we obtained data from five types of sources: interviews with residents of the neighborhoods, interviews with police officers serving the neighborhoods, internal police records and published reports on police services pertaining to the neighborhoods, published and unpublished data relating to the neighborhoods from agencies external to the communities studied, and unobtrusive observation of neighborhood conditions.[5]

Research Questions

With the larger and more diverse data base of the St. Louis study, a number of more complex questions about relationships between scale of production and police performance could be asked. The first was, of course, whether the simple relationships found in earlier studies remained the same. The second was whether introducing neighborhood level socio-economic variables would affect the relationships between size and citizen experiences and evaluations. The third was whether positive relationships existed between police department size and the level of formal police training and/or college education of its officers. Further questions concerned whether formal police training and/or college education for officers on a police force had an independent effect on citizen experience and/or citizen evaluations. With answers to these, we could explore whether empirical data supported a more complex model of the relationships between police department size and citizen evaluation of police performance. The final question considered whether police departments of 10 or fewer full-time officers were less effective than larger departments.

Question One: Are There Bivariate Relationships Between Size of Police Department Serving a Neighborhood and Citizen Experiences, Citizen Evaluations, and Per Capita Costs of Providing Police Services?

As shown in Table II, there is a significant relationship between size of the police department serving a neighborhood and many of the indicators of citizen experiences and evaluation used in this and earlier studies. Size here was measured by the number of full-time officers employed by the department serving a neighborhood. Size was positively related to the victimization rate in a neighborhood and to citizens' indication that crime is increasing. Size was negatively related to the percentage of citizens assisted, the percentage of citizens indicating that police respond "very rapidly" in their neighborhood, the percentage of citizens rating the job being done by their police as "outstanding," the percentage of citizens rating police-community relations as "outstanding," the percentage of citizens strongly agreeing with the statement that police are "honest," and the percentage of citizens strongly agreeing that "police treat all citizens equally."[6] Size was also positively related to the per capita expenditures for police services in the neighborhoods.[7]

Question Two: Do the Relationships Between Size of the Police Department Serving a Neighborhood and Citizen Experiences, Citizen Evaluations, and Costs Continue When Socio-Economic Variables Are Introduced?

Since the St. Louis study used a multi-strata research design that could study variation in neighborhood wealth and in the proportion of black residents, it was necessary to determine the independent effect of these socio-economic factors on citizen experiences and evaluation. The statistical technique used was multiple regression.

Table II

The Correlation Between Size of Police Department and Experiences, Evaluations, and Costs

	X_1 Size of Police Department
	r
Experiences	
X_6 Percentage Victimized	.43[b]
X_7 Percentage Assisted	-.35[b]
X_8 Percentage Stopped	-
X_9 Percentage Know Someone Mistreated by Police	-
X_{10} Percentage Know One or More Policeman	-
Evaluations	
X_{11} Percentage Indicating Crime Increasing	.51[a]
X_{12} Percentage Indicating that Police Response is Very Rapid	-.64[a]
X_{13} Percentage Rating Job of Police Outstanding	-.49[a]
X_{14} Percentage Rating Police-Community Relations Outstanding	-.25[c]
X_{15} Percentage Strongly Agreeing that Police Are Honest	-.38[b]
X_{16} Percentage Strongly Agreeing that Police Treat All Citizens Equally	-
Costs	
X_{17} Per Capita Costs of Police Services in Neighborhood	.77[a]

[a] $p = .001$ [b] $p = .01$ [c] $p = .05$

Table III presents the standardized regression coefficients (betas) for each of three independent variables:

X_1 = the number of full-time officers employed by the police department serving the neighborhood.

X_2 = the median value of owner-occupied housing in the neighborhood.

X_3 = the percentage of black residents in the neighborhood.

The R^2 for each dependent variable is also reported.[8]

As can be seen by comparing Tables II and III, the signs of all relationships between size and the dependent variables remained the same even though the introduction of two additional independent variables did in some cases reduce the size of the coefficient. The socio-economic variables had some interesting relationships with citizen experiences and evaluations. The median value of owner-occupied housing was negatively related to being victimized, knowing someone mistreated, knowing one or more policemen, and perceiving that crime is increasing. It was positively associated with rating the job of police as outstanding, rating police-community relationships as outstanding, agreeing that police are honest, and agreeing that police treat all equally. The percentage of black residents living in a neighborhood was positively related to victimization rates, to being stopped by police, to knowing one or more policemen, to perceiving that crime is increasing, and to the per capita costs of providing police services. It was negatively related to agreeing that police treat all equally.

In <u>no</u> instance did the sign of the relationship between police department size and citizen experiences, citizen evaluations, and per capita costs correspond to the direction predicted by the consolidation model (Figure II, above). Thus, findings from this study paralleled

Table III

Standardized Regression Coefficients and Variance Explained for Relationships Between Size, Socio-Economic Variables and Experiences, Evaluations and Costs

	X_1 Size	X_2 Median Value Owner Occupied Housing	X_3 % Black Residents	R^2
Experiences				
X_6 % Victimized	.29[b]	-.30[b]	.49[a]	.63
X_7 % Assisted	-.35[c]	-	-	.12
X_8 % Stopped	-	-	.31[c]	.10
X_9 % Know Someone Mistreated	-	-.34[b]	.49[a]	.49
X_{10} % Know 1 or More Policemen	-	-.48[a]	-	.23
Evaluations				
X_{11} % Indicate Crime Increasing	.42[a]	-.20	.28[c]	.42
X_{12} % Police Respond Very Rapidly	-.64[a]	-	-	.42
X_{13} % Rate Job Outstanding	-.16	.47[a]	-	.27
X_{14} % Agree Police Honest	-.30[c]	.43[b]	-	.33
X_{15} % Agree Police Treat All Equally	-	.35[b]	-.16	.20
Costs				
X_{16} Per Capita Costs of Police in Neighborhood	.72[a]	-	.33[c]	.68

[a] $p = .001$

[b] $p = .01$

[c] $p = .05$

findings from the earlier studies and supported the alternative model.

Question Three: What Are the Relationships Between the Size of Police Departments and the Levels of Formal Police Training and College Education Among Sworn Personnel?

One reason cited for consolidating police departments is that larger police departments can afford to train their personnel more effectively and to hire college educated personnel. The simple relationship between police department size and median weeks of training of sworn personnel in the St. Louis study was positive (r = .45), but the simple relationship between size and the proportion of officers having some college education was negative (r = -.44). When size, percentage of black residents, and median value of owner-occupied housing were combined in a multiple regression equation, only size had a significant effect on the levels of training (beta = .45). When combined with size and percentage of black residents, median value of owner-occupied housing was most important in explaining the proportion of officers having some college education (beta = .47). Size of police department was next (beta = -.39), and percentage of black residents was third (beta = .26).

Thus, a definite and positive relationship between police department size and the level of formal training among sworn personnel on a force was found. In the St. Louis area, the two largest departments had for many years required their officers to attend a 16-week training program at a joint City-County police academy. But state law now requires all new police officers in St. Louis County to attend the same City-County academy. At the time of our study, however, the legislation had been in effect only a few months and the level of training in most departments had not yet been affected by the legislation. Over time,

training levels in the smaller departments will rise to the level of the two largest departments.

Surprisingly, the level of college training among sworn personnel was negatively related to police department size. Many of the small and medium-size departments employed a higher percentage of officers with some college education than did the two large departments.

Question Four: What Are the Independent Effects of the Levels of Formal Police Training and College Education Among Police Personnel Serving a Neighborhood Upon Citizen Experiences?

Despite all the interest in increasing the levels of training and education among police personnel, few studies have attempted to examine what effects these variables have on police performance. In a preliminary analysis of data from the St. Louis study, training was not positively associated with either more "professional" attitudes by individual officers or with more favorable citizen experiences or evaluations.[9] The level of college education was weakly associated in a positive direction with more "professional" attitudes but had little impact on citizen experiences or evaluations. Since this analysis was bivariate, it did not explore the independent effects of training and college education when other factors were controlled.

When median weeks of formal training among officers in a department was added to each multiple regression equation for experiences shown in Table III, an independent effect (beta = -.22) occurred in only one equation -- the percentage of citizens knowing one or more policemen. Level of training was negatively related to the likelihood that citizens will know one or more policemen. Median value of owner-occupied housing remained the most important variable explaining the

percentage of citizens knowing police (beta = -.47). The R^2 value for the equation was raised from .23 to .28 by adding median weeks of training to the equation.

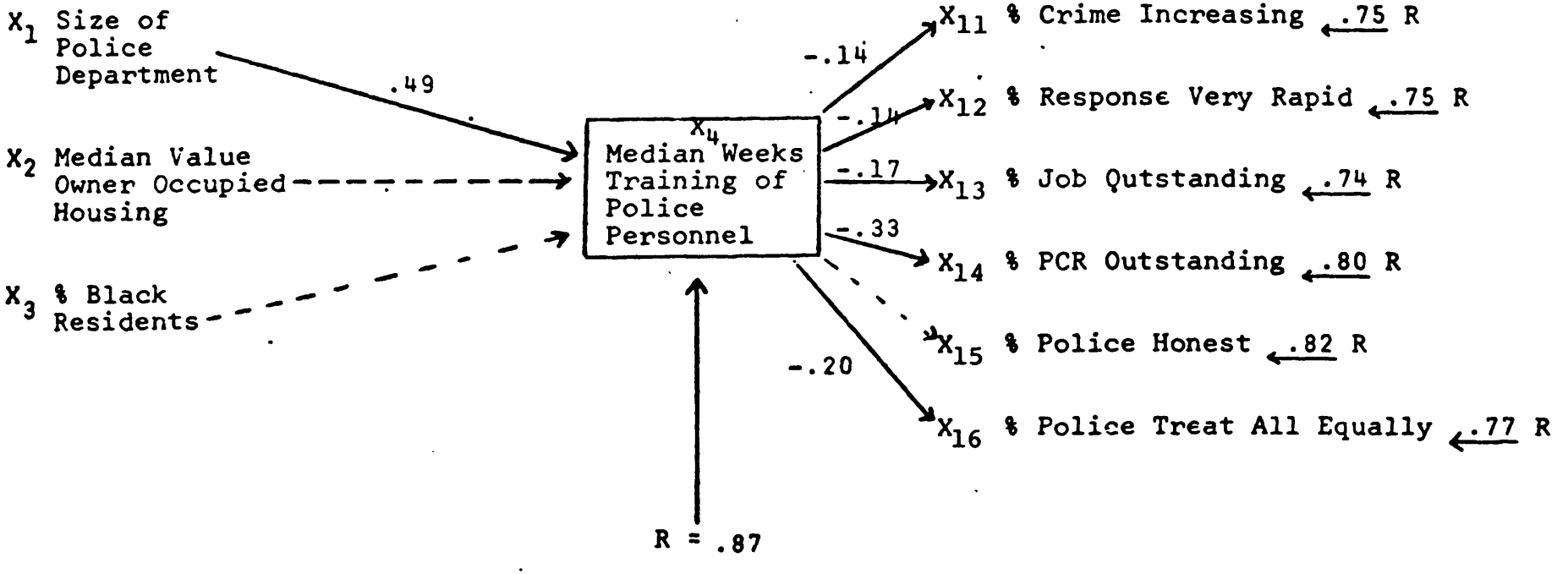
The percentage of sworn personnel having some college education had an independent affect on only the equation for the percentage of household victimizations in the year prior to our survey. Four variables had independent effect on victimization rates: percentage of black residents (beta = .44), median value of owner-occupied housing (beta = -.40), size of police department serving the neighborhood (beta = .37), and percentage of officers having some college education (beta = .20). Adding percentage of personnel having some college education to the equation increased R^2 from .63 to .65. The relationship between victimization rates and level of college education among police serving a neighborhood was thus weakly positive.

Question Five: What Is the Independent Effect of the Level of Formal Police Training and College Education Among Police Serving a Neighborhood Upon Citizen Evaluations?

When variable X_4 (median weeks of training of police personnel serving a neighborhood) was introduced into a multiple regression equation with X_1 (size of police department serving a neighborhood), X_2 (median value of owner-occupied housing units in neighborhood), and X_3 (percentage of black residents in neighborhood), its independent effect on the six evaluation variables was negative in five equations and non-existent in the sixth. The negative coefficients varied from weak to moderate as shown on Figure 5. Median levels of formal police training was negatively related to the percentage of citizens likely to rate police community relations as outstanding (beta = -.33). Thus, controlling for police department size and the socio-economic

Figure 5

The Independent Effects of Training Levels on Citizen Evaluations Controlling for Size of Police Department and Socio-Economic Status of Neighborhood



36

standing of a neighborhood, the median level of formal police training among sworn officers serving a neighborhood was inversely related to citizens' evaluations of police performance! Although the size of a police department serving a neighborhood was positively related to median levels of training, this intervening variable did not have a positive effect on citizen evaluations of police performance.

When variable X_5 (percentage of officers having some college experience) was introduced as an intervening variable with police department size and the two background socio-economic variables, its independent effect on the evaluation variables was negligible for five of the dependent variables. The percentage of officers having some college was related to only variable X_{15} -- percentage of citizens rating police-community relations as outstanding (beta = -.19) -- and then in a negative direction. Thus, contrary to the belief of consolidation proponents, the level of college training of police officers serving a neighborhood did not have any general effect on citizens evaluations of police performance.

Question Six: Is There a More Complex Model of the Relationship Between Size of Police Department and Citizen Evaluation of Police Performance Which Is More Empirically Warrantable Than the Simplified Consolidation Model or Its Alternate?

Implicit in the set of questions we pursued was an assumption that the evaluations of police performance were explained better by a more complex model of relationships than by the simplified models presented earlier. This complex model would include police department size and the socio-economic conditions of a neighborhood as exogenous variables. Endogenous variables operating as intervening variables would include such factors as the production strategies used by a department, resources available to a department for allocation to police services, levels of

college education and formal police training among police personnel, and the types of experiences or perceptions citizens had concerning their police. Although the St. Louis study provided an extensive data base for empirical examination of a complex model, the number of cases involved did not enable us to simultaneously explore the additive effect of all the above variables. Despite the limitations of our data, however, we could examine the empirical fit of a complex model such as the one presented in Figure 6.

The number of cases in the St. Louis data set also precluded simultaneous consideration of the patterns of all citizen experiences on citizen evaluation. But we could examine a path-analytic diagram of the complex model by using victimization rates as the citizen experience variable and the percentage of citizens indicating that crime is increasing as the citizen evaluation variable. As seen on Figure 7, the size of the police department serving a neighborhood had a direct effect on citizen response that crime is increasing (P11-1 = .39). The victimization rate in a neighborhood had a stronger direct effect (P11-6 = .47). Since size was also related to the victimization rate (P6-1 = .29), it had an indirect effect on this evaluation variable through victimization (P11-6 x P6-1 = .14). Size also had a small indirect effect through training (P11-4 x P4-1 = .07).

One method to test the adequacy of a path model is to decompose the correlation coefficient between variables in all relevant paths, and then total the computed relationships of all simple and compound paths. If this sum closely approximates the original correlation coefficient, then the model is well specified.[10] The bivariate

Figure 6

A More Complex Model of the Relationships Between Size of Police Department and Citizen Evaluations

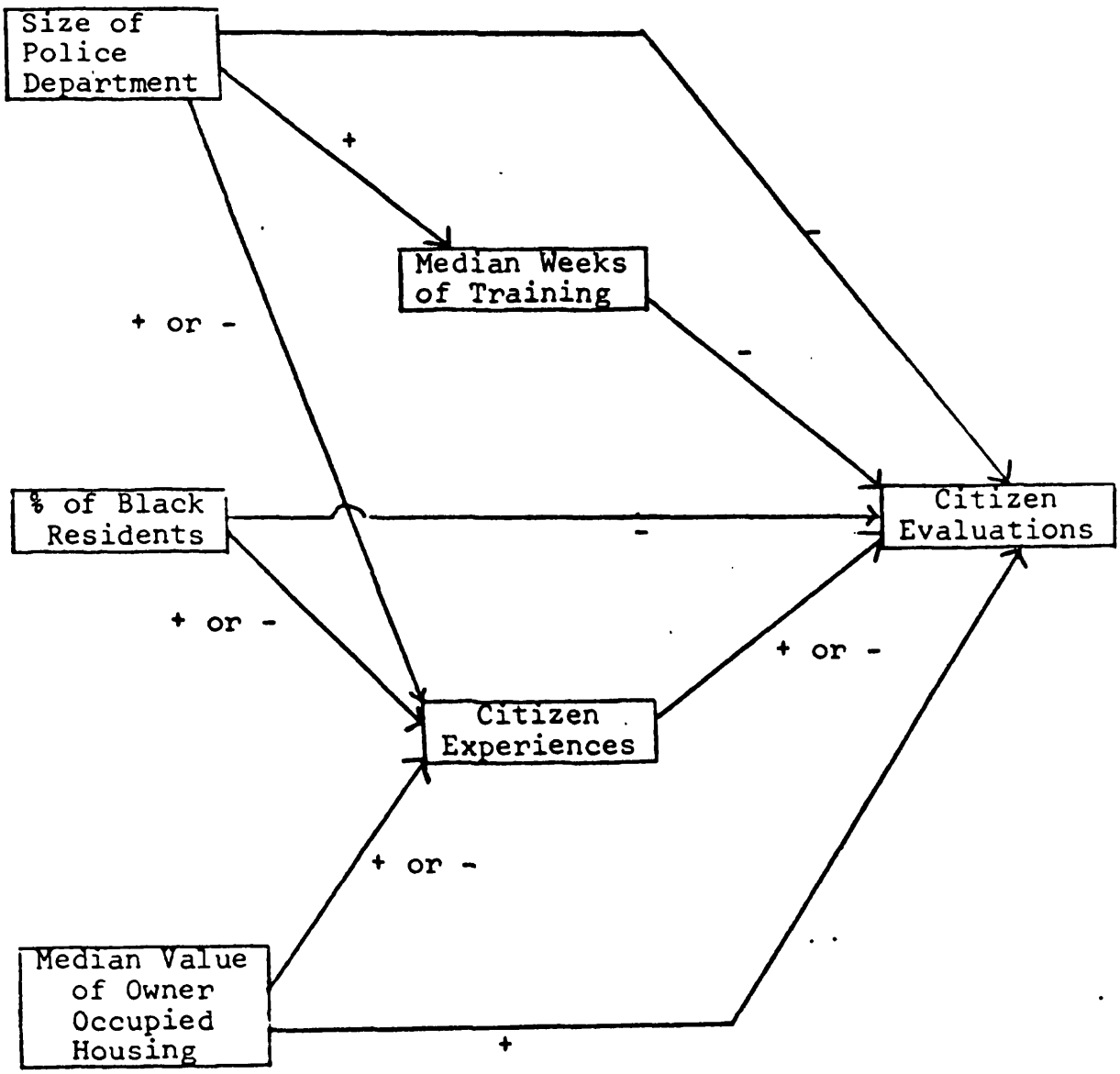
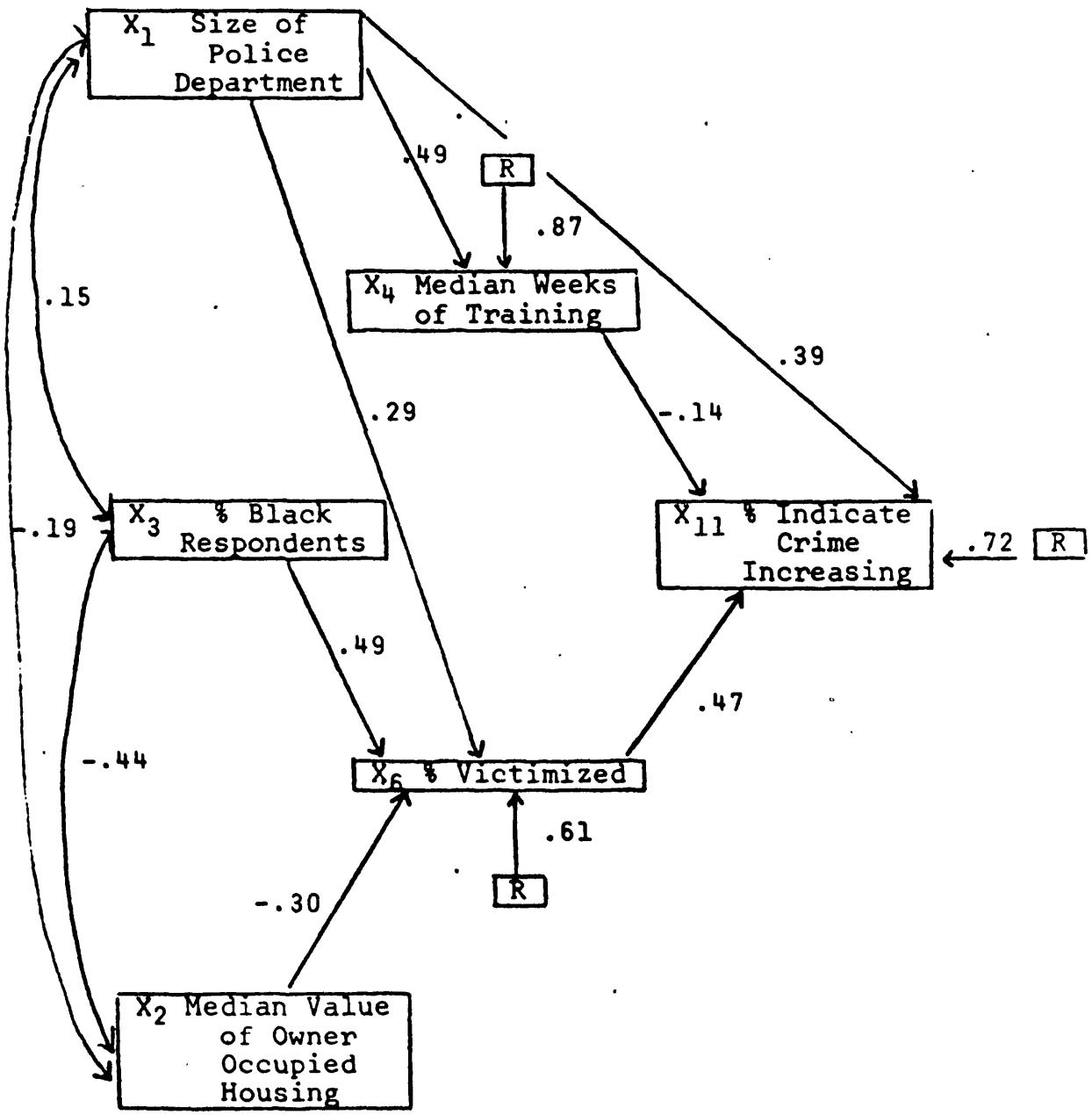


Figure 7

Path Analytic Diagram with Victimization as an Intervening Variable and Citizens' Indication that Crime is Increasing as a Dependent Variable



correlation coefficient between police department size and the percentage of citizens indicating increasing crime in their neighborhood was .51. When all simple and compound paths of the model presented on Figure 7 were added, the result was .52. Thus, this model seemed to specify rather closely the complex relationships between police department size, background socio-economic variables, median weeks of formal training, level of victimization, and citizen evaluations concerning increasing crime in their neighborhood.

The model also explained a much higher level of variance than did the simple bivariate analysis. The variance explained by the simple relationship between police department size and percentage of citizens indicating that crime is increasing was .24. The variance explained of the dependent variable in Figure 7 was .47.

Question Seven: Are Police Departments With 10 or Fewer Full-Time Officers Less Effective Than Larger Departments?

While the consistent relationship between police department size and diverse measures of police performance was negative, a curvilinear relationship may have existed. If this were the case, small departments would have shown lower performance than somewhat larger departments did, even though the dominant direction of the relationship would have been negative. The presence of a curvilinear relationship would not have been exposed by the linear regression techniques used in the previous analysis.[11]

A more detailed analysis of the performance of police agencies having 10 or fewer full-time officers is important given the frequent judgment by study commissions that the very small departments are the most ineffective departments. The National Advisory Commission on

Criminal Justice Standards and Goals in its "Standard on Combined Police Services," for example, recommended in the selection included in your Readings: "At a minimum, police agencies that employ fewer than 10 sworn employees should consolidate for improved efficiency and effectiveness." As evidence, it cited an earlier report by the Advisory Commission on Intergovernmental Relations, Report on State-Local Relations in the Criminal Justice System (1970):

> Small local police departments, particularly those of 10 or less men, are unable to provide a wide range of patrol and investigative services to local citizens. Moreover, the existence of these small agencies may work a hardship on nearby jurisdictions (110).

The National Commission was sensitive to the problem of creating police departments that are too large, but did not specify what that size is. The Advisory Commission stated: "Most police and government administrators recognize the dangers inherent in extremely large police agencies and agree that the very small agencies present much greater problems to the effective and efficient delivery of police services" (110, my emphasis).

The data from the St. Louis study provide a preliminary answer to whether the smallest departments are least effective and if so, how serious that difference is.

Of the 44 neighborhoods for which we have performance measures, nine were served by departments of 10 or fewer full-time officers. At the other extreme, 11 neighborhoods were served by either the County (436 officers) or the City (2,200 officers). Twenty-four of the sample neighborhoods were served by municipal departments ranging in size from 11 to 76 full-time officers. Because of the small number of cases, each performance variable was dichotomized at or near the mean to

produce an even distribution so that the police agencies could be placed in a high or low category. For example, the mean percentage of citizens ranking the job being done by a police department as outstanding was 25 percent. Dichotomizing this variable resulted in 21 neighborhoods that ranked police high and 23 that ranked police low. The dichotomized experience and evaluation variables were then run against a recoded size variable that placed all departments with 10 or fewer men in a "small" class, departments with 11 to 76 full-time officers in a "medium" class, and the County and the City in a "large" class.

Table IV presents the proportion of agencies in each size class that were rated better than the average on the experience and evaluation variables. This table has been adjusted so that the larger the figure shown, the "better" the performance. This was done because on some variables, such as victimization a low percent would reflect "better" police performance, while on other variables, such as percentage of citizens rating the job of police as outstanding, a high percent would be "better." But if the figures had been presented in this manner, comparison between categories would have been difficult. As a result, we have presented the table so that the higher the figure shown, the "better" the performance. The "above mean" or "below mean" indicated in parentheses to the side of the variable name indicates which direction on the original data would be "preferable."

On the experience variables, the small departments compared rather favorably with the other classes. For victimization, seven of the nine departments in this class had lower than mean victimization rates, while only 40 and 45 percent of the other size ranges had low victimization rates. For assistance, the middle range appeared more effective

Table IV

Percentage of Neighborhoods Served by Small, Medium or Large Police Departments with Higher Performance Levels

Experiences	Neighborhoods Served by 10 Full-Time Officers or Less	Neighborhoods Served by 11 to 76 Full-Time Officers	Neighborhoods Served by 436 or 2200 Full-Time Officers
X_6 % Victimized (Below Mean)	78	42	45
X_7 % Assisted (Above Mean)	33	67	36
X_8 % Stopped (Above Mean)	33	54	36
X_9 % Know Someone Mistreated (Below Mean)	44	46	63
X_{10} % Know 1 or more Police (Above Mean)	56	50	27
Evaluations			
X_{11} % Indicate Crime Increasing (Below Mean)	78	58	27
X_{12} % Indicate Police Respond Very Rapidly (Above Mean)	33	79	9
X_{13} % Rate Police Job Outstanding (Above Mean)	44	67	9
X_{14} % Rate PCR Outstanding (Above Mean)	67	50	9
X_{15} % Strongly Agree Police Honest (Above Mean)	56	58	9
X_{16} % Strongly Agree Police Treat All Equally (Above Mean)	78	46	45
	N = 9	N = 24	N = 11

than either the small or large departments. The medium sized departments also appeared to stop a larger proportion of their citizens than did either the small or large departments. A curvilinear relationship was thus evident for both assistance and stop rates. As for citizens knowing someone mistreated, the large departments appeared to perform better than either of the two smaller groups. It should be pointed out that four of the six neighborhoods above the mean on this variable were served by the County Department. In regard to citizens knowing police officers, a larger proportion of citizens in both the small and medium-sized departments knew police than in the large departments. Thus, for the experience variables, there was some evidence of a curvilinear relationship for two of the five variables. For four of the five variables, the proportion of small departments performing above the mean was larger than or approximately equal to the figure for the large departments.

There was some evidence for a curvilinear relationship on evaluation variables X_{12} and X_{13}. For the other four evaluation variables, either the small departments were most effective or the small and medium-sized classes were about equally effective. In no case did the big departments achieve an evaluation rating higher than those of the small departments. In several instances, the difference in proportions between the small and large departments was quite large even for so small a number of cases.

This evidence does not support the contention that "the very small agencies present much greater problems to the effective and efficient delivery of police services" as charged by the National Advisory Commission on Criminal Justice Standards and Goals. Since

victimization rates are lower than average in 78 percent of the neighborhoods surveyed where police services are delivered by a department of 10 or fewer full-time officers, these departments do not appear to be creating "spillover" problems for other surrounding departments.

On the cost side, the per capita costs of the smallest departments are quite low indeed. In the St. Louis area, the smallest department costs ranged from $7.20 to $20.56 per capita. The per capita costs of the small-to medium-sized departments ranged from $12.78 to $36.87; the large departments were $19.29 and $52.77. Consequently, comparing the relative performance levels, it would be difficult to argue that the smallest departments are less efficient. While an efficiency ratio cannot be computed because of the nature of our performance measures, departments spending less per capita and performing as well or better than departments spending more per capita can definitely be considered more efficient.

The evidence presented here should not be interpreted to support contentions that all efforts to consolidate police departments are likely to lead to less effective or efficient performance. The appearance of several curvilinear relationships suggests that departments in the 11 to 76 range may have higher levels of performance on some variables than do either the smallest or largest departments. Thus, consolidation of several small departments into a medium-sized department may indeed increase effectiveness.

But the a priori judgment that small departments are necessarily ineffective and should be eliminated is not supported by this evidence. In fact, this evidence finds that the severest problems of law enforcement occur in the largest departments. If future study commissions

wish to focus on the most ineffective segment of the police industry, they should shift their focus from the small to the large.

What Have We Learned?

In the studies described, we have found a consistent pattern of evidence contrary to the underlying assumptions made by proponents of consolidation. In both simple bivariate and multivariate analysis, the size of a police department serving a neighborhood has either a negative relationship or no relationship with a diverse set of performance measures. The studies have been undertaken in five metropolitan areas and have included a nationwide study of 109 cities. For consolidation of police departments to result automatically in improved performance, the evidence should indicate the opposite pattern of relationships. It does not.

We have thus begun the application of the method of institutional analysis we have been discussing in this Study Guide. We have taken current reform proposals related to calls for consolidation of police forces and examined the basic underlying assumptions for their proposals. We have posed an alternative set of hypotheses which predicts different consequences than those proposed by the advocates of police consolidation. We have then examined these conflict hypotheses in a number of related studies. In light of the series of studies, we would certainly recommend the rejection of the simple consolidation model posed at the beginning of this chapter.

However, we do need to be conservative in how we interpret the findings from these series of studies. The lack of findings concerning

a positive effect of size of police departments upon the performance of neighborhood level police services should not be interpreted as evidence that all proposed police consolidations should be rejected. But the evidence should lead us to be skeptical of automatic acceptance of an assumption that larger scale always leads to improved performance. The data from these studies do not provide evidence one way or another concerning some types of police including traffic patrol on major metropolitan thoroughfares or the provision of crime laboratory services.

The evidence we have presented above should support the contention that with regard to regular patrol, immediate response to reported crimes, criminal investigation, the provision of emergency services, and other neighborhood-level police services, very small-to medium-sized police departments consistently perform more effectively and frequently at less cost than do large police departments.

Findings from this series of studies on the comparative performance of differently sized police agencies call into question the assumed positive relationship between size of urban agencies and level of quality of service. Will this be true of other services? Public choice theorists would predict similar findings for all urban public goods and services which involve face to face delivery. A review of empirical studies in the field of education has revealed a similar consistent lack of evidence supporting economies of large scale (Kirp E. Cohen, 1972) The findings of the California Task Force on Local Government Reform also challenge the traditional wisdom by finding little evidence for economies of large scale across a wide range of services.[12] However, considerably more empirical work on this question is needed. Maybe you will want to participate in research activities related to these questions.

FOOTNOTES

[1]Several recent studies have discussed the problems of measuring police output or police effectiveness and concluded that most of the currently used measures -- such as reported crime rates or arrest rates -- are inadequate (See National Advisory Commission on Criminal Justice Standards and Goals (1973:151-153): Advisory Group on Productivity in Law Enforcement (1973:7-12); American Bar Association, 1972). These same reports see victimization surveys as a more accurate method of obtaining information about incidence of crime than reported crime rates. Further, there is a more general acceptance of other indicators derived from citizen surveys than was present a few years back. The National Advisory Commission on Criminal Justice Standards and Goals reports:

> Perhaps the most controversial group of new indicators of police effectiveness are those that are products of citizen feelings toward the police. The extent to which the police are successful in alleviating citizens' fear of crime reflects police productivity. Consequently, the percentage of the population having feelings of insecurity about police protection should be measured, perhaps as part of a victimization survey.
>
> Conversely, public acceptance of the police could enable the agency to be more effective in deterring crime and apprehending criminals. Citizen satisfaction with police services thus should be evaluated. As such surveys are undertaken, it would be desirable to measure attitudes among various population groups, based on age, income, race, sex and other variables. It should also be understood that such citizen perceptions are often swayed by conditions totally unrelated to police behavior, performance or effectiveness (p. 153).

For an extended discussion of these problems see E. Ostrom (1971) and (1973).

[2]The hypotheses from the alternative perspective have been stated in E. Ostrom _et al_. (1973) and E. Ostrom and Whitaker (1973).

[3]See Aberbach and Walker (1970); Jacob (1971) and U.S. Department of Health, Education and Welfare (1969).

[4]Roger B. Parks and Dennis C. Smith both shared in the design and execution of this study. We appreciate the participation of many graduate and undergraduate students at Indiana University in making this study possible. We also appreciate the excellent cooperation given by police chiefs, police officers, and citizens in the St. Louis area.

[5]Portions of the above paragraphs come from E. Ostrom, Parks, and Smith (1973).

[6]Copies of the survey instruments used in this study are available by writing to the author.

[7]The method used for allocating costs of police service provided provided a neighborhood by a large department as described in E. Ostrom, Parks, and Whitaker (1973).

[8]A stepwise multiple regression program was used. The R^2 value represents the variance explained by the total equation.

[9]We also found that the mean level of college education of officers in a department was weakly and negatively related to success in obtaining warrants while mean total weeks of training showed an inconsistent pattern regarding the ratio of warrants applied for to warrants issued. See E. Ostrom and Smith (1974).

[10]See Boyle (1966), Duncan (1966), Dye and Pollack (1973), and VanMeter and Asher (1973).

[11]When the variable -- number of full-time officers -- is squared and entered into multiple regression equations, the size of the coefficient rises slightly, giving some evidence of a curvilinear relationship. The untransformed variable was utilized throughout this paper since it is much more meaningful to those interested in affecting changes in institutional arrangements.

[12]Task Force on Local Government Reform. Public Benefits from Public Choice (Sacramento: State of California. Office of Planning and Research. California Council on Intergovernmental Relations, 1974). Since only a small printing was made of this report and the interest in it has been high, a reprint of the original report has been issued by the Workshop in Political Theory and Policy Analysis and is available for $1.50 by writing to the Publications Secretary, Workshop in Political Theory and Policy Analysis, Morgan Hall 121, Indiana University, Bloomington, Indiana 47401.

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CHAPTER V

DOING RESEARCH AS A METHOD OF TEACHING POLICY ANALYSIS

All of the studies reported on in the previous chapter were designed and executed as part of a teaching program. Many college teachers and students have been interested in trying themselves to combine teaching and research activities. In this chapter I will reflect on the methods we have used in undertaking research projects related to the method of institutional analysis and design.

The first experiment in a teaching-research venture came about somewhat spontaneously. After a three-year period in an administrative position, I was returning to my first year of full-time teaching. In the fall of 1969, I taught a graduate seminar in which we surveyed the published literature on different methods for measuring the output of public agencies. We intended to undertake some form of research in the spring of 1970 based on this literature review. During that spring I was also assigned to teach a sophomore honors seminar. As I began to talk with graduate and undergraduate students about their interests for that spring, both groups of students suggested that some attempt be made to "get out into the field." After a number of discussions with students, we decided to combine the activities of the graduate and undergraduate classes for the semester. There were three graduate students and 25 undergraduates involved in the joint endeavor.

One of the graduate students selected the police industry as a focus for study. We then turned to the question of what institutional variables could we study related to the output or performance of urban

police. We were, of course, limited to the study of institutional variables where examples were close to home. We had no outside research funds and no chance of finding such funds in the short time span left before the end of the semester. The Indianapolis metropolitan area was the only large urban center close enough that we could travel there (one hour away), and where we were likely to find some range of institutional arrangements.

In studying the map of Marion County, and in discussing the Indianapolis metropolitan area with people who knew it well, we spotted the three small "excluded" cities of Beach Grove, Lawrence and Speedway. While "Unigov" had just gone into effect, these three independent communities had not been included for the purpose of the provision of many urban services including police. The Police Department of the City of Indianapolis became organized under a special district which kept approximately the same boundaries as the former city. Each of the three excluded communities had their own mayor, council, police and fire departments and most of their former powers.

Most important for us, each of the three communities was very similar to the others and very similar to neighborhoods located immediately inside the boundaries of the Indianapolis police district. A significant variation in the organization of police services (under a relatively "controlled" situation) was located within 50 miles of the University.

In the undergraduate class we reviewed some of the theoretical arguments made for and against increasing the scale of urban police forces. In the graduate class, we began to plan the methodological aspects of the study: a sampling plan was developed, a preliminary questionnaire was designed, a set of field procedures was determined.

The preliminary questionnaire was presented to the undergraduate class for critical review. New questions were added by them and earlier questions were revised.

We then started intensive pre-testing. Teams of graduate and undergraduate students pre-tested the questionnaire first in Bloomington and eventually in Indianapolis neighborhoods near to those in our sample frame. Four drafts of the questionnaire were pre-tested. A total of 67 pre-test interviews were conducted prior to actual fieldwork.

In addition to the training that students received from pre-testing the survey instrument, we also trained all who were going to do fieldwork in a small group laboratory located in the Department of Sociology. Three sessions lasting three hours each were spent in the lab where practice interviews could be undertaken in a soundproof room before a two-way mirror. Students who were not participating in a particular interview observed the trial interviews in the adjacent room and practiced coding each of the trial interviews on a final copy of the survey instrument.

Such a facility is a great boon to the training of students. Comments can be made about the strength and weaknesses of a particular interviewer's approach as the interview is progressing without interrupting the interview itself. With a significant physical separation between the practice interview and the observing students, the practice interviews become very realistic. Students who had pre-tested the earlier versions of the instruments participated as "respondents." We included a variety of "typical" situations that one finds in the field. By the time the students began the official interviews for the study, they were thoroughly familiar with the survey instrument itself and how to handle a variety of the more difficult situations they might encounter in the field.

The Urban Affairs Center at Indiana University provided us a University car for 10 days during the spring. We also used several personal cars on the days when more students went at one time. Interviewing was conducted by teams of students working in the same area. While each student interviewed as an individual, fellow students were in the area and team leaders drove by every hour or so in case there might be difficulties.

We left campus each afternoon around 1:00 p.m. We were thus interviewing by around 2:30 in the afternoon. We took a dinner break around 5:00 and returned to interview until about 8:30 in the evening. On Saturdays we interviewed from around 10:00 in the morning until 8:30 at night. We achieved a relative balance between male and female respondents by selecting these times in which to interview. For a less sensitive issue than policing, we might have considered selecting by random means the individual respondent of a household. However, this requires asking a number of questions about the composition of the family at the beginning of the interview. We felt that our response rate would be seriously jeopardized by such a strategy when we were asking about local police performance.

The spirit and professional attitude of the students during the field work was unbelievable. They were participating in something they had helped to plan and they were interested in doing a good job. They were not being sent off to do someone else's legwork. All of us were in the field together. The students saw me put in as long a day as they -- doing the same kind of work they were.

My participation in the field work made a big difference in many ways. It reinforced their feeling that this was a <u>joint</u> project. I did not "wave" them off to the field while I did "more important"

work back at the campus. Driving to Indianapolis and back, we discussed all aspects of the project and many questions were cleared up by this active communication. It meant that I got to know the students better than one ever does in a regular classroom setting (something that helped a great deal at later junctures when asked for letters of recommendation). It also meant that I knew the survey instrument backwards and forwards myself. When it came to data analysis, I had a personal knowledge of each of the six communities. Further, I knew the weaknesses that existed in the instrument from my own experience in interviewing. A faculty member is not likely to be told about such weaknesses unless participating at the field level. Even with extensive pre-testing, all survey instruments are likely to have at least a few weaknesses.

The joint participation of graduate students with undergraduate students was also very important. For graduate students it meant one of their first experiences of direct work with undergraduates. They were placed in the role of teacher in many small group situations that were very natural. It gave them excellent training for work in these types of situations in the future. For undergraduate students, it meant that they really got to know a few graduate students well. Many undergraduate students never meet graduate students except in the formal classroom Teaching Assistant role. They thus have a hard time finding out about graduate school. Since the undergraduate students were honors students, they had lots of questions about going to graduate school and really appreciated the opportunity to discuss these and other questions with the graduate students involved.

We had used the responses on the early pre-test questionnaires to develop an instrument that was largely "precoded." We could have either keypunched or utilized an optical scanning sheet to code the data from

the survey instrument. We chose the latter strategy since it meant the students could code their own interviews in the classroom or at home. Most students do not know how to use a keypunch. We double coded all responses so that we could increase the accuracy of our data. By the end of the semester we were beginning to obtain data from the study. Many of the students took additional research hours during the summer or in the fall in order to do analysis of the data itself.

The graduate students and I felt it was imperative to report back to the local communities and to respondents interested in the study. We wrote a monograph during the summer and fall which was sent to each of the police departments and local governments as well as to all of our respondents who had indicated an interest in the project. That monograph, in a revised format, was eventually published by Sage Publications in their Administrative and Policy Studies Series of the Professional Papers.

In addition to the University cars provided by the Center for Urban Affairs, we also needed considerable typing during the spring research period and for the monograph itself. Fortunately, the Research Committee at Indiana University had provided a small research allowance which enabled us to employ work-study secretaries during the entire period. We estimated that the total cost of the project from February to June -- through data collection and initial analysis -- was approximately $500. During the summer and fall of 1970 a small grant from the College of Arts and Sciences enabled us to employ a Research Assistant on the project (who eventually joined the original three graduate students and myself as co-authors of the monograph). I stress the limited funds since I have had many young faculty members tell me that they could <u>never</u> undertake a research project because they could never get a large, outside grant.

Indeed, large grants enable one to undertake projects which are simply not possible without substantial funding. However, it is possible to do small, carefully designed studies without large sums of money. It does take many hours of work. During that spring semester there were many nights that all the graduate students and I stayed up very late in order to have materials well prepared for the next day. Tight time schedules characterize this kind of teaching-research. One cannot delay a week or so here and there. Field work must be done by a certain date or the students will never see their own results.

The next fall we undertook a similar project in the Chicago metropolitan area. This time I sought and obtained from the University a small grant to support the costs of hotel rooms and food while we did the research in Chicago. The choice of Chicago as a research site came about as a result of a discussion with several black graduate students about the results of our Indianapolis study. They wondered why we had "tested" the effects of community control in all white communities in Indianapolis when the issue was particularly important to the black community. My response was that Indianapolis was nearby and with limited funds we had to design a study within the limits of the variation possible in Indianapolis. I then asked where in the U.S. was there a metropolitan area in which several, small, independent black communities were located with their own police departments. One of these students came from the Chicago area and indicated that several such communities were located there. He visited the communities to insure that we would have their cooperation and the design of the second study was underway almost before the first was completed.

A graduate seminar of eight students and an undergraduate class of 35 was organized in the Department of Political Science in cooperation with

the Afro-American Studies Program. The students started with the survey instrument designed by the class in the spring. They added some questions and deleted others. An initial pre-testing was undertaken in several black neighborhoods in Indianapolis. The last pre-test was undertaken by a small group of graduate and undergraduate students in Chicago in neighborhoods similar to those selected for study. A series of training sessions were held in the Small Group lab as we had done the previous semester.

The entire class spent 10 days in Chicago. We left Bloomington on a Friday afternoon and put in a full day of interviewing on Saturday. We stayed through a day of interviewing on the following Sunday. We were able to conduct over 450 interviews during this time. We again used optimal scanning forms to code the data. We had more difficulty in getting data ready for analysis by the end of the semester. The data were not ready for analysis until after the semester was over. However, again, a number of students took additional hours of research during the following semesters in order to continue work on the project. Several of the students made repeated trips back to the small communities to provide them with as much information as possible about the results.

As a "spin-off" from this project, six of the undergraduates continued working in the small communities during summer and Christmas vacation periods for several years. We developed several internship programs so that the students could work on projects designed in the community. Local leaders made several trips to Bloomington to discuss the problems of governing small, independent, poor and black communities with students on the local campus.

A year passed before the next teaching-research project was undertaken. This time we did have external funds from the Center for Studies

of Metropolitan Problems at N.I.M.H. and could undertake a much more ambitious project than ever before. Since the findings were consistent in both the Indianapolis and Chicago studies, we were interested in looking at a much larger range of neighborhoods all in the same metropolitan area. The St. Louis metropolitan area afforded an extensive mix of types of jurisdiction both in terms of their size and their socio-economic conditions.

The graduate seminar of eight students began in the prior fall and focused on both methodological and theoretical questions. The undergraduate course of about 35 students began in January. About the same division of labor between the two classes was adopted. The graduate students were involved in all major methodological decisions. Interested undergraduates were also involved, but the class discussed the questionnaire itself, interviewing techniques and field work procedures rather than some of the more technical questions of sampling and design.

A number of students, not in the undergraduate class, had indicated a strong interest in going to St. Louis with us. I agreed to let them participate in the fieldwork if they would go through all of our training sessions. Approximately 55 students spent 10 days in St. Louis during which time we interviewed close to 2000 citizens and began interviewing police officers in the departments serving the neighborhoods included in our study. Interviewing in teams was continued as before and the spirit was probably even higher for this project than earlier.

In addition to their interviewing in the afternoon and evening, we also organized a number of morning seminars. A staff member from the St. Louis Metropolitan Planning Commission, the Chief of the St. Louis County Police Department, and two local faculty members each held an optional morning seminar. We rented a bus on a fourth morning, and

Charles Henry, then City-Manager of University City, took us on a memorable tour of his City and neighboring sections of St. Louis, ending up at City Hall and a presentation by Police Chief James Damos.

Students were required to keep a journal while they were in the field. Each evening they were expected to write down some of their own daily experiences in an effort to try to get them thinking more seriously about the experiences they were having. These journals were turned in at the end of the fieldwork for comment and then returned to the students. We made xeroxes of the journals as we found them to be very valuable in understanding some of the patterns in data analysis.

In the spring of 1974, we organized a small graduate seminar and undergraduate class to develop multiple methods of measuring the output of urban street lighting and road repair. This project did not utilize an institutional variable as a major part of the design. Rather, it was more a methodological exploration of how to measure output more effectively. Our earlier use of survey methods had been criticized as being too "subjective." We were concerned with both how to use multiple methods of measuring output <u>and</u> with discovering the relationship between more "objective" methods of gathering data and survey data.

None of the above projects was perfect. All of them had errors and difficulties. We learned from each how to improve the next, but still have much to learn. I only discuss the history of them here since so many college teachers and students seem to be interested in how we undertook these series of studies.

In discussing these projects with college teachers I have been asked many questions and have passed along much advice. I will try to summarize some of this advice here.

Don't think of undertaking research with students as a "cheap" way of getting "your" research done. If you have a project already fully designed and want to have it done in a particular way, go ahead and undertake it outside of the classroom. Students know when they are being used. The learning experience for them and for you is ruined if you try to have the students do your work for you.

On the other hand, the major responsibility for structuring the joint project will fall on your shoulders. It does not work to come into a class with a completely open book and say "Well, what shall we do?" Undergraduate students have not had a prior experience in designing research. You need to have a series of major research questions that could be answered and a basic design worked out for how to do so. You need to plan a schedule very carefully and with tight deadlines. Figure out how much time you are going to need to process data for preliminary analysis. Also determine how much time students will have to write a short paper on the study. Then, figure back to the date at which time the fieldwork must be completed. Then, figure back to the date when the final instrument must be ready. Then, figure back to the date when pretesting must be ready, etc. Deadlines for the entire semester should be worked out well in advance and discussed with all participants. Projects where the faculty member tells the students to go out and research some question completely on their own usually do not work out too well.

Have tolerance for much controversy and discussion about the project. If students are really going to have input into the design of some type of measuring instrument, they will indeed feel strongly that "their question" should be included. We had many a session until midnight with students waiting it out -- afraid to go home for fear

that an important variable might be cut. Each had to defend his ideas to the others in light of the need to keep measurement instruments short. This defense tightened their thinking. By the time analysis came around, they knew what variables they would analyze and why.

Open up opportunities for undergraduates to participate in sampling procedures but don't expect them all to do so. We always announced when we would be working on drawing the sample and encouraged all who wanted to come to do so. This way, some undergraduates really saw the "innards" of the project and spent long hours on this aspect. But, courses of this type take more time than usual. You need to be careful how much you require as opposed to how much you open up as a possibility.

Don't try to teach this way in a required course unless you give students several options for what they could do. Do spend a long time counselling with each student thinking of taking the course. Warn them about the extra time required to do field work. Stress that the field-work will take a high degree of maturity. Play down any thought they have that this will be a "lark." Doing any kind of research is serious business. Stress the seriousness of the project and that it is a real project with results of use to the students and to others. Students are tired of "make-work" projects that don't add up to anything. If you can start a program where students build on the work of former students, this is particularly exciting to those involved.

In counselling be sure to find out how many other courses each student is planning on taking during this semester. If the student is heavily loaded advise against taking your course. If you have an option to offer additional research hours for such a course, do so. This way students can spend more time on the course without hurting their academic performance in other courses.

Expect some students to "chicken out" at the last minute and have other options for them. You have not "hired" them so you cannot "fire" them. However, there are always related projects that a student could do if he or she did not want to undertake the data collection effort itself. Once you are in the field you may also find that one or two students want to go home for any of a myriad of reasons. Be prepared for this and have ways that they can get home without embarrassment or difficulty. The worst thing for general morale in the field is someone who is not happy there.

Be prepared yourself for times with little sleep during the semester. Given the tight deadlines, someone has to be sure that things are done on time and that someone is you. In all of the projects described above, both graduate and undergraduate students were extremely hard-working. They were willing to put in long hours to insure that we met a deadline. However, their willingness would be considerably diminished if they were the only ones under pressure.

Spend lots of time training in survey techniques if you are going to do a citizen survey or in whatever measurement technique you are going to use. Students should learn how to do research techniques correctly. They will then know how difficult it is to do careful research. If they are instructed in and do their work well, the data so obtained is worth something. Otherwise, the whole experience is a lot of hard work for worthless data.

Discuss with students the unusual things that "might" happen in the field so they are prepared. When doing a citizen survey they may encounter individuals who have had too much to drink, are senile or are otherwise incapacitated. Such individuals should not be considered valid respondents. Further, such a situation can be difficult for the

student if not handled well. Advise them how to get out of a home by skipping over the major portion of the instrument and coming to the end of the survey very rapidly. In this way the student does not have to leave with some excuse. He or she can simply thank the "respondent" for their help and leave. The circumstances should then be described on the questionnaire and the respondent dropped from the study.

Check with each community to see if they have local laws against conducting surveys without a permit or after certain hours. In our St. Louis survey we gave each Department a full list of all our interviewers so if a respondent called the local Police Department they could verify that a student's name was on the list.

Try to send out letters to potential respondents before the start of fieldwork telling them about the project and the period of time when the study will be conducted. If students are then well identified with badges and carry a letter of introduction in their notebooks, respondents who might otherwise be hesitant to be interviewed, will be more willing. We also had a "hotline" phone active during the period of time when students were in the field. A respondent could call this number to confirm that this was a University-based study and that the student was connected with the project. A student who became ill in the field or wanted to ask advice could also call.

Do some phone calls back to respondents to verify that an interview was conducted. Knowledge that a sample of respondents will be contacted does reinforce all the other messages that you want "real" data. Peer pressure under a team situation also reinforces this. Also you can increase your response rate by calling individuals who have refused an interview on the phone and individuals who have not been at home when a student comes by. In the St. Louis study, we had a small

telephone team that increased our response rate by quite a bit. We used a reverse telephone book to get the phone numbers for this process.

If you can, try to offer a year-long course. One semester is very short to run an entire course like this. I have not yet been successful in organizing the undergraduate side of these projects on the basis of a year-long effort. However, in light of my own experience, I will try harder next time.

Also, try to organize a series of research projects over time so that they are cumulative. If you are located in a region where some major institutional changes are contemplated, you may be able to do a time series study where research instruments are administered for a number of years before and after a change. Even if some institutional change is not currently under consideration, a project run in the same location on a yearly basis should have one major section of "repeat" questions utilized each and every time so that time series data is developed. Or, pick some key questions which each of several projects will address even though they may do so in different ways. This means that you are both contributing to a cumulative social science as well as giving the students the chance to build upon their own work and that of other students.

Be serious about plans to publish your findings. This leads you and others to insure from the beginning that your methods are valid and reliable. It also opens up possibilities for some of the more interested students to learn about intensive data analysis and writing. However, do <u>not</u> expect the first round of data analysis to produce publishable papers. Students will be able to do descriptive papers on the first round and some limited hypothesis testing. However, it will

take much more time than is available in a course to do publishable work. However, many of the students associated with these projects described above have taken more time and have published work jointly or in some cases individually. These projects -- particularly the St. Louis project -- have also been the sources of data for several doctoral dissertations.

For the student who might be interested in participating in such a joint teaching-research project, my advice would be to be sure that he or she is serious about the endeavor before joining. There will be many frustrations and much hard work. Doing data collection requires a level of maturity and willingness to follow through with careful procedures. Coding data can be boring, but if not done carefully can ruin the whole effort. There are lots of "fun" things involved, but the project itself cannot be thought of primarily as a fun thing.

In the Readings section you will find some of the research instruments we have utilized during the projects described above. The first set of materials comes from our St. Louis project. The instruments utilized in the multiple measures project were revised in light of our experience and published in a Portfolio of Professional Papers on "Measuring Urban Services: A Multi-Mode Approach". In the Portfolio we tried to present instruments which could be used directly by a public interest group or city government for measuring the output of street light and road repair activities in their community. Some of these revised instruments are reproduced in the second part of the Readings section.

PART TWO - READINGS

Readings for Chapter I

Reading -- Alternative Governmental Structures . . .

. . . by the Advisory Commission on Intergovernmental Relations [Reprinted from Governmental Functions and Processes: Local and Areawide (Washington: U.S. Government Printing Office, 1974), 107-117.]

Thoughts for Further Readings

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THOUGHTS FOR FURTHER READINGS

The following is a short bibliography of works related to the broad field of public policy analysis. This bibliography is by no means complete, but should give you a relatively broad overview of the variety of studies considered to be included in the field of public policy.

Bauer, Raymond, Lewis A. Dexter, Ithiel de Sola Pool. American Business and Public Policy (Chicago: Aldine-Atherton, 2nd ed., 1972).

Caro, Francis G. (1971) Readings in Evaluation Research. New York: Russell Sage Foundation.

Dawson, Richard E. and James A. Robinson (1963) "Inter-party Competition, Economic Variables, and Welfare Policies in the American States," Journal of Politics (May), 265-289.

Dorfman, Robert, ed. (1965) Measuring Benefits of Government Investments. Washington, D.C.: The Brookings Institution.

Dye, Thomas R. (1967) "Government Structure, Urban Environment, and Educational Policy," Midwest Journal of Political Science II (August), 353-380.

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Hatry, Harry P., Richard E. Winnie and Donald M. Fisk (1973) Practical Program Evaluation for State and Local Government Officials. Washington, D.C.: The Urban Institute.

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Ranney, Austin. "The Study of Policy Content: A Framework for Choice," in Austin Ranney (ed.) Political Science and Public Policy (Chicago: Markham Publishing Co., 1968).

Scioli, Frank P. and Thomas J. Cook, eds. (1975) Methodologies for Analyzing Public Policies. Lexington, Massachusetts: Lexington Books.

Sharkansky, Ira (1972) "The Analysis of Public Policy: Recent Additions to an Ancient and Honorable Literature," Midwest Journal of Political Science 16 (May), 324-337.

Sharkansky, Ira (1971) "Economic Development, Representative Mechanisms, Administrative Professionalism and Public Policies: A Comparative Analysis of Within-State Distributions of Economic and Political Traits," The Journal of Politics 33, No. 1 (February), 112

Sharkansky, Ira (1967) "Government Expenditures and Public Services in the American States," American Political Science Review 61 (December), 1066-1075.

Sharkansky, Ira, ed. (1970) Policy Analysis in Political Science. Chicago: Markham Publishing Company.

Sharkansky, Ira (1969) The Politics of Taxing and Spending. New York: Bobbs-Merrill Press.

Sharkansky, Ira and Richard I. Hofferbert (1969) "Dimensions of State Politics, Economics and Public Policy," American Political Science Review LXIII (September), 867-879.

Suchman, Edward A. (1967) Evaluative Research. Principles and Practice in Public Service and Social Action Programs. New York: Russell Sage Foundation.

THOUGHTS FOR FURTHER READINGS

Arthur L. Stinchcombe, in his book Constructing Social Theories, also discusses the methods of multiple hypotheses, strong inference, and crucial testing. You will find Chapter II particularly relevant. Stinchcombe illustrates the idea of crucial experiments by drawing on Emile Durkheim's study of suicide which simultaneously disproved some of the prevailing theories of the era while giving increased warrantability to Durkheim's own theories.

In addition, I strongly recommend reading several works by Donald T. Campbell. The first is a short monograph he wrote with Julian C. Stanley entitled Experimental and Quasi-Experimental Designs for Research (Chicago: Rand McNally & Company, 1966). It originally appeared in N. L. Gage, ed. Handbook of Research on Teaching (Chicago: Rand McNally & Company, 1963). The focus is primarily on experimental research and as such describes a number of research designs that are very difficult for policy analysts to accomplish. We can rarely create "true" experiments in the sense described by Campbell. But what is most important about this monograph is the discussion of sources of invalidity or "rival hypotheses" which exist for any type of research design. In other words, regardless of the type of research design chosen, alternative methodological hypotheses always exist which threaten either the internal or external validity of the results. Internal validity asks the question: "Did, in fact, the experimental treatments make a difference in this specific experimental instance?" (Campbell and Stanley, 1966: 6). External validity is concerned with the problem of generalizability. "To what populations, settings, treatment variables, and measurement variables can this effect be generalized?" (Campbell and Stanley, 1966: 6). While all research designs are

potentially threatened by at least some sources of internal or external validity, Campbell and Stanley assess the strength of different research designs in helping to eliminate rival hypotheses.

The concept of rival hypotheses used by Campbell and Stanley is different from, though related to, Chamberlin's multiple working hypotheses. Chamberlin is concerned with a conscious development of a series of alternative working hypotheses prior to the design of research or in the interpretation of research. Campbell and Stanley are concerned that generalized processes other than those consciously thought of in either a working hypothesis or in a series of working hypotheses could conceivably be the cause of the results observed in an experiment. Designing research with multiple working hypotheses in mind, as well as rival methodological hypotheses, ensures a higher level of both internal and external validity.

The research designs discussed by Campbell and Stanley are also discussed by Edward A. Suchman in Evaluative Research. Principles and Practice in Public Service and Social Action Programs (New York: Russell Sage Foundation, 1967). You will find here that the discussion of research design is applied to public policy problems and thus more relevant to the concern of this Study Guide. But the discussion of rival hypotheses in Suchman is not as extensive as it is in Campbell and Stanley.

Another excellent source for a discussion of rival hypotheses is Donald T. Campbell's article "Reform as Experiments" in American Psychologist 24 (April 1969), 409-429. It has also been reprinted in Readings in Evaluation Research edited by Francis G. Caro (New York: Russell Sage, 1971). The nine threats to internal validity described in this article include:

1. History: events, other than the experimental treatment, occurring between pretest and posttest and thus providing alternate explanations of effects.

THOUGHTS FOR FURTHER READINGS

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1. History: events, other than the experimental treatment, occurring between pretest and posttest and thus providing alternate explanations of effects.

2. Maturation: processes within the respondents or observed social units producing changes as a function of the passage of time *per se*, such as growth, fatigue, secular trends, etc.

3. Instability: unreliability of measures, fluctuations in sampling persons or components, autonomous instability of repeated or "equivalent" measures. (This is the only threat to which statistical tests of significance are relevant.)

4. Testing: the effect of taking a test upon the scores of a second testing. The effect of publication of a social indicator upon subsequent readings of that indicator.

5. Instrumentation: in which changes in the calibration of a measuring instrument or changes in the observers or scores used may produce changes in the obtained measurements.

6. Regression artifacts: pseudo-shifts occurring when persons or treatment units have been selected upon the basis of their extreme scores.

7. Selection: biases resulting from differential recruitment of comparison groups, producing different mean levels on the measure of effects.

8. Experimental mortality: the differential loss of respondents from comparative groups.

9. Selection-maturation interaction: selection biases resulting in differential rates of "maturation" or autonomous change.

A volume which is helpful in thinking about the development of theories is Paul Davidson Reynolds, *A Primer in Theory Construction* (Indianapolis, Bobbs-Merrill Company, 1971). A somewhat more technical work dealing with the same topic is Hubert M. Blalock's *Theory Construction: From Verbal to Mathematical Formulations* (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1969).

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Readings for Chapter III

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A SAMPLE PROPOSITIONAL INVENTORY DERIVED FROM THE TRADITIONAL LITERATURE ON METROPOLITAN REFORM

by

Elinor Ostrom

The first part of this reading is devoted to a preliminary propositional inventory relating size of jurisdiction, fragmentation, or overlap to predicted outcomes. The propositions represent a rewording in propositional form of statements found in the traditional literature on metropolitan reform or in survey articles describing this literature. Each proposition cites at least one source -- many cite multiple sources. Specific paragraphs presenting the original language of the sources are then presented in the second part of this reading. Full citations are given so that you can turn, where desired, to read the original works in full.

Although the list of propositions is relatively long, no pretense of completeness is made. The propositions represent only the "diagnosis side" of the traditional metropolitan reform movement. They describe relationships thought to exist in the world. Thus, the diagnostic propositions are the easiest to begin examining empirically. There is an additional set of propositions not listed here which represents a "prescription side" of the traditional metropolitan reform movement. Examples of such propositions are these: "Consolidation leads to the equalization of the tax burden for services received in a metropolitan area;" "Consolidation leads to reduced costs of providing public

services in a metropolitan area."

It is somewhat more difficult to empirically examine prescriptive propositions than it is to empirically examine the diagnostic propositions. The problem is in finding appropriate empirical examples of the prescriptive propositions that will satisfy proponents of these reforms. Obviously, if one could do a before-after study of a large-scale consolidation, the results of that consolidation could be examined. One could, however, use very large center cities as examples of what a consolidated structure would look like, at least within their boundaries. But many proponents of consolidation would not accept this as an adequate empirical investigation of the effects of consolidation, since multiple units would still exist in the metropolitan area.

Since this propositional inventory can be extended to include other diagnostic propositions or the set of prescriptive propositions, you may want to undertake a further examination of the literature to expand the list and/or modify the wording of propositions to ensure that they conform closely to the intent of the proponents. I have purposely numbered the propositions by jumps of 10 to facilitate addition of new propositions.

The sample inventory presents propositions in their most elementary form so that the specific variables involved and their simplest relationships may be clearly identified. This is a crucial step in elucidating a logic and in forming a foundation for preliminary empirical examination of the propositions. Further refinements and extensions of this set of propositions will involve stating propositions in more complex form.

Two type of relationships are presented in the list. First is the

set of propositions relating size or fragmentation to specific direct outcomes (such as an increase in public service costs or a decrease in citizens' capacity to fix responsibility). Propositions of this type are the first ones presented in the list and identified as a proposition specifying a direct relationship (such as Size-D_{10} or Frag-D_{30}). Second is a set of propositions that relates either size or fragmentation to an intervening variable which is, itself, assumed to produce either good or bad outcomes. Examples of such intervening variables are "modern methods of management" and "professionalization of public officials." It is frequently assumed that the effects of these intervening variables are known. For example, in this literature it is assumed without much question that professionalization of public officials improves the quality of public services. For every proposition that posits a relationship with an intervening variable (such as Size-I_{20} or Frag-I_{20}), there is an implicit hypothesis that the intervening variable has a positive or negative effect on the performance of metropolitan institutions. I have not attempted to enumerate here the predicted consequences for these intervening variables -- that is another project. But some of these relationships are specified in the article, "Metropolitan Reform: Propositions Derived from Two Traditions," which is included in this Readings section for chapter III.

One further comment before presenting the propositions. Considerable confusion about the meaning of the terms "size of jurisdiction" and "multiplicity of jurisdictions" or "fragmentation" exists in the literature. The size of a jurisdiction, for example may be defined by

any of the following:

- The geographic extent of a jurisdiction.
- The population of a jurisdiction.
- The size of the operating unit itself measured by the number of employees or the size of the budget.
- The scale of the unit producing services measured by the number of units of output produced.

The second is probably the most frequently used in the following propositions, but the other three are also meant from time to time and may be reasonable substitutes.

Jurisdictional multiplicity or fragmentation are also indefinite terms in the literature. There appear to be two somewhat distinct concepts involved in the more general term of multiplicity. The first would seem equivalent to horizontal differentiation within a metropolitan area. Where the concept of horizontal differentiation seemed to be the referent, the term "fragmentation" has been used in the following propositions. Thus, governmental fragmentation or fragmentation among units producing a particular set of services (police, for example) refers here to the fact that a number of units exist contiguously and for the most part do not overlap.

The second concept would seem equivalent to vertical differentiation. Where this has seemed to be the referent, the term "jurisdictional overlap" has been used. Thus, to speak of jurisdictional overlap among units herein describes a situation in which governmental units overlay each other -- in effect, sharing part of the same geographic space.

There is a close interchange in the literature between propositions about the size of a jurisdiction and propositions about fragmentation. In sheer volume, more propositions are stated about fragmentation than

about size. But, the propositions relating to size appear to me to undergird many of the propositions about fragmentation. The closeness of these variables (as well as the lack of empirical evidence to support them) is well reflected in the following statement by Wilbur R. Thompson:

> No phrase in urban affairs is encountered more frequently than "political fragmentation." One interpretation is that the local public economy is made less efficient by being divided into too many political subdivisions too small to capture the many potential internal and external economies of scale. Water and sewage systems are either too small or, if of optimum size, are underutilized; police communication systems and street networks are uncoordinated across a maze of city boundaries. The presumption is that the case for larger political scale is obvious and overpowering, so much so that only apathy, vested interest, or plain cussedness could account for opposition to enlarged local government--ideally metropolitan-area-wide "local" government. What is usually absent is any quantification of the purported economies foregone and/or the public service quality presumably sacrificed by retaining fragmented local government, and this is a gap in the case for bigness because political consolidation cannot rest easily on some trivial gain in scale economies. A small sacrifice in efficiency will not offset a strong need or preference for either personalized political participation or intimate political control. At the moment we are not able to say with any assurance whether our pattern of political fragmentation in metropolitan areas is due to the fact that substantial economies of scale (a) do not exist, (b) are thought not to exist, (c) have not been thought about by the electorate, or (d) are not large enough to exchange for the luxury of retaining intimate small local government.

We shall discuss this problem more thoroughly in the forth reading in this section.

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[1]A Preface to Urban Economics (Baltimore: Johns Hopkins Press, 1965, pp. 2557-259).

THOUGHTS FOR FURTHER READINGS

Advisory Commission on Intergovernmental Relations (1962) *Alternative Approaches to Reorganization in Metropolitan Areas.* Washington, D. C.: U. S. Government Printing Office.

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Hallman, Howard W. (1970) "Community Corporations and Neighborhood Control," Pamphlet No. 1. Washington, D.C.: Center for Governmental Studies.

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Hays, Samuel P. (1964) "The Politics of Reform in Municipal Government in the Progressive Era," *Pacific Northwest Quarterly* (October), 157-169.

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Readings for Chapter IV

Reading A -- Combined Police Services . . . . by the Task Force on Police of the National Advisory Commission on Criminal Justice Standards and Goals [Reprinted from Police (Washington: U.S. Government Printing Office, 1973), 108-116.]

Reading B -- Planning and Organizing for Criminal Justice . . . . by the Michigan Advisory Commission on Criminal Justice [Reprinted from Criminal Justice Goals and Standards (1974), 188-192.]

Thoughts for Further Readings

Readings for Chapter V

Reading A -- Instructions Concerning the St. Louis Questionnaire.

Reading B -- General Instructions Concerning St. Louis Field Trip.

Reading C -- Letter sent to household prior to St. Louis Fieldwork.

Reading D -- Letter carried by all student-interviewers in St. Louis.

Reading E -- Citizen Questionnaire Used in St. Louis.

Reading F -- Police Questionnaire Used in St. Louis.

Reading G -- Area Control Sheet used in St. Louis.

Reading H -- Area Description Worksheet used in St. Louis.

Reading I -- Block Description Worksheet used in St. Louis.

Reading J -- Team Leader Check List used in St. Louis.

Reading K -- Using a Road Condition Observation Form . . . . Pamphlet Number 3 of Measuring Urban Services - A Multi-Mode Approach.

Reading L -- Obtaining Citizen Feedback on Urban Street Conditions . . . . Pamphlet Number 5 of Measuring Urban Services - A Multi-Mode Approach.

Reading M -- Deciding Where to Measure . . . . Pamphlet Number 11 of Measuring Urban Services - A Multi-Mode Approach.

Thoughts for Further Reading

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(Given to each student who participated in the St. Louis study. Gives information relative to that particular questionnaire.)

U421 and Y771
Spring, 1972
Elinor Ostrom

Instructions Concerning the St. Louis Questionnaire

On March 8, 1972, you will receive a relatively final draft of the questionnaire to be utilized in the field. We will pretest this instrument still one more time during this next weekend. We hope revisions will be minor. If it is still too long, we will need to drop some more questions. We may work on the format a little more to make it as easy as possible to administer when we are in the field. However, generally, this can be considered a relatively close copy to the final.

For now page one (the blue sheet) of the questionnaire is stapled to the remainder of the questionnaire. However, page ones will be located in a separate section of your notebook when you are in the field. Address labels will be pasted to the upper left hand corner of the page. As you proceed around your block, you will work from the blue page one's. If someone responds to your knock and gives you an interview, you will switch to the section of your notebook containing the remainder of the interview. If this is your first interview for the day, you will post "1" in the box on page 2. When you return to page 1 for that address, you will then post a "1" in the box on that page (C_9). Keeping track of the number of the interview and posting it to both page 1 and page 2 is absolutely essential. It is the only way you will be able to get page 1 and the remainder of the interview packet together for coding.

In the evening after interviewing, you will need to spend some quiet time with your notebook. For every completed interview, you will pull the page 1 for that interview and the remainder of the interview and staple them together before coding onto optical scan sheets.

If someone is not at home the first time you come by, or if you should happen to have a refusal, you would fill out page 1 as fully as possible and go on to the next house. If no one was home, you will return several times to the same home to see if any one has returned. Each time you return you will circle a higher number on the number of call backs (please post a small date next to the number of the call back). Kind of keep a watch on your block as you are walking around it. If you notice someone returning after you have passed by, go back there quite soon in order to obtain an interview while someone is there. If you do receive a refusal, give the details on the back of the first page. In the evening, you will code information for any refusal from page 1 only and the rest of the op scan sheet will remain blank.

You may notice that a house is unoccupied when you first knock on the door. In that case code row 2 under C_{12} and code C_{14}, C_{15}, and C_{17}. You would code these columns in the evening and that is all we can do when a house is empty. A similar strategy should be used for a vacant lot (row 1 in C_{12}) and for a commercial establishment (row 3 in C_{12}) except that C_{12} is the only coding that you would do in the field.

If you notice an address for which you do not have an address sheet with mailing label attached, please pull one out of the section in your notebook where blank page ones are kept. Fill out the address at C_{11} and check at the end of the line. You will need to obtain a sequence number for that address from Roger Parks after returning from the field.

Precoding

You will note that many of the questions already have responses posted below the question. These come from our pretests in St. Louis, Read only those response. where a [READ] box is located. Code the others as noted IF the response given by the person you are interviewing is similar to the one noted. IF NOT, write the response given by the person. Do not hesitate to write notes frequently on the questionnaire. We will go over the entire group after returning and in depth comments are very valuable.

Questions with an X number next to them will not be coded this round. Data from these questions will be available next fall.

Position in the Household question

We all need to know who it is in the household you are talking with. The person's "position in the household" might be any of the following: father, mother, son, daughter, resident aunt, resident uncle, resident grandfather, resident grandmother, roommate, single male, single female etc. In the main you do not need to ask this question and you will know the answer before the end of the interview. For this reason the question is on the blue sheet rather than asked during the interview. IF, however, it is not clear who the person is with whom you are talking, ask in the last section of the interview so that you can code this accurantely.

Number of interruptions

Write here anything unusual that happened during an interview.

Name of Neighborhood:

Try to go over your map before going out to a new area for interviewing so that you can get the name given to you for each area. After a team has been in an area for a while, they should get together and pool information about the nature of neighborhood names within the area and the team leader should write this up on the area worksheet.

What do you think your neighborhood will be like five years from now?

We noticed in pretesting that respondents frequently mentioned particular factors affecting their estimate of the future. When this occurs, write down their comments below this question on the lines provided.

What do you like best and least:

Try to write down as clearly as possible what the respondent says for these and other open ended questions.

How often do you think the police patrol this neighborhood...

You will notice that here the precoding is set for times per day or per week. If a respondent indicates "frequently" probe for a more specific answer in this case. We do want to know about how often a day or week they think they are receiving patrol service.

Ranking Sheet and Budget Question:

Before you stand up and hand the respondent the pad of ranking sheets, mention that you are going to do so. This is particularly important for male students interviewing female respondents in their living rooms. Memorize the instructions for both the ranking sheet and budget question so that you can say them verbally while respondent is beginning to read instructions on sheet. DO NOT CONTINUE TO SAY INSTRUCTIONS IF RESPONDENT BEGINS TO READ INSTRUCTIONS IN A CONCENTRATED WAY. While the respondent is working on this sheet you have an opportunity to work on your notebook. If no one is looking over your shoulder, go back to the blue sheet for this interview and post interview number and as much of the rest of the information as you can at this point. Whenever you have a change like this go over interview notes and clarify what you have done. Be alert to the need of the respondent for further clarification of these two questions but frequently respondents like to study them for a while and you have a chance for doing some of your own notation.

If a respondent mentions that one or more of the "crimes" listed should not be considered as a crime, please so indicate at the bottom of page 4.

If respondents indicate that 2 or 3 items are "the same" please so note on the ranking sheet when it is returned to you.

On the budget question.....do not decide in advance that respondents will have difficulty and thus be hesitant and concerned when you explain this question. We found in our Indianapolis pretest with the new instructions that most respondents answered the question relatively easily.

When the respondent finishes these questions open your notebook right then and insert the ranking sheet in your notebook after page 4.

R-112

(Given to each student who went into the field. Provides specific information about the field trip itself.)

U421
Y771
Elinor Ostrom

GENERAL INSTRUCTIONS CONCERNING ST. LOUIS FIELD TRIP

Departure:

We will leave Bloomington on the afternoon and early evening of March 24, 1972. There will be a class meeting at 2:30 on March 24, 1972, at 1022 East Third to insure last minute coordination. Teams should plan to travel together. A list of our cars with drivers and passengers will be completed during the week of March 20.

Where We Will Stay:

We will be staying at the Ben Franklin Motor Hotel at 4645 North Lindbergh near the Airport (314/426-7200). A list will be passed asking for your suggestions concerning a roommate. Preferably, individuals planning to return to Bloomington at the same time should room together.

PLEASE NOTE: Phone calls are billed at 20¢ each when made from the motel room. Since these would mount very fast and cannot be paid for from University funds, no phone calls should be made from your room. A pay phone is located in the area and should be used for phoning. However, you can receive in-coming calls without charge.

Our Schedule For Interviewing:

The weekends will be our major days for interviewing. More people--both males and females--are home on Saturday and Sunday. Consequently, we will make a big push on those days to get a substantial number of interviews.

On Saturdays, March 25 and April 1, we will plan to interview from 10:30 to 1:30 and then break for lunch. We will resume interviewing at 2:30 and continue till 7:30.

On Sunday, March 26, we will start interviewing around 1:30 and continue till 7:30. On Monday through Friday, our average day will be to begin interviewing at 3:00 p.m. and continue until 7:30 p.m.

Teams will meet together each day before leaving for the field and will leave the hotel at least one half hour to forty-five minutes before planning to start interviewing.

Seminars In St. Louis:

We are in the process of arranging several voluntary seminars with individuals in the St. Louis area for morning periods. A schedule of these will be typed up and circulated later.

Use of University Cars:

We will need to maintain a car log of who has a University car and for what purpose. University cars may be checked out by a group of students in order to visit various cultural attractions of the St. Louis area. Planning for the use of University cars will be greatly facilitated when teams travel together and when plans are made ahead of time.

What To Wear and What To Bring:

We will be traveling in sedans with five people in each car. Consequently, you need to be careful to limit the amount of clothes you bring with you. It is impossible to predict our weather. A "layer" approach should be taken. Be sure to have enough warm clothes to be comfortable outside on a cold day. Be sure to have scarves, gloves and comfortable shoes. Be prepared for cold drizzly days. We can also have some warm days.

There is a laundromat adjacent to the motel so you can easily wash clothes mid-week.

PLEASE bring a watch of some sort to St. Louis. Time is so important in meeting your teams at specified times and generally in organizing a field trip.

Do bring books for your other courses. Mornings and evenings will often be free for that purpose.

Checking out in the Evening:

If you happen to go somewhere in the evening that is not arranged by our staff, please check out with me, Roger Parks or Dennis Smith. We need to have an idea where you are going and when you expect to be back. We do not want to place any false "missing person" reports nor do we want to be unaware if someone were to need our assistance.

R-114

(Initial letter sent to resident prior to student-interviewers going to field)

CENTER FOR URBAN AFFAIRS
Indiana University
Bloomington, Indiana 47401

Dear Citizen:

I am writing to ask your help in a study of police services in the St. Louis area. As you know, the issue of police response to community problems is of crucial interest in America today. I hope that you will take a few moments to help us in an investigation of some of these problems.

I am a professor of Political Science at Indiana University in Bloomington, Indiana. This semester my students in an urban affairs course are conducting an extensive study of police services provided to citizens in the St. Louis area. A very important part of our study is the evaluation of these services by the citizens receiving them. We have chosen 2500 addresses in thirty neighborhoods throughout St. Louis and St. Louis County where we will be interviewing people. Your address is one of those chosen.

During the week of March 25 to April 1, 1972, a student from Indiana University will be calling at your home to conduct an interview. The student will be wearing an identification badge. The interview will last about fifteen minutes. Since our study will be successful only with your cooperation, we sincerely hope that you will consent to be interviewed when the student calls. If you cannot be interviewed at that time, the student will be glad to make an appointment to come back at a more convenient time.

Your responses will be kept completely confidential.

If you would like to receive a summary of our results when the study is completed, please mention this to the student who visits your home.

I would like to thank you in advance for your cooperation. Through this university course, we hope to contribute to the understanding of some important issues as they are viewed by citizens of the St. Louis area.

Sincerely yours,

Elinor Ostrom

Elinor Ostrom
Associate Professor

EO:mrr

Telephone: (812) 337-9483

R-115

(Letter which all student-interviewers carried in their notebooks in the field)

CENTER FOR URBAN AFFAIRS INDIANA UNIVERSITY

TO WHOM IT MAY CONCERN:

This is to introduce Susan Rux who is a student of Urban Affairs at Indiana University. Students in this program are conducting a survey on citizen attitudes toward police in the St. Louis metropolitan area. Your cooperation and help are necessary for this to be a study of scientific worth. Fifteen minutes of your time will mean a lot in terms of the accuracy and reliability of this survey.

If you have any questions concerning this survey, please call the following number at the University of Missouri, St. Louis campus where a representative of this project can give you more information (453-5331). Or, if you wish, you may call (collect) to Bloomington, Indiana, at the following number (812/337-7874).

Thank you very much for your cooperation.

Sincerely yours,

Michael Armer

Michael Armer
Director
Center for Urban Affairs

mz

1022 EAST THIRD STREET, BLOOMINGTON, INDIANA 47401, TELEPHONE 812-337-7874

R- 116

C_1 through C_6 is sequence number on address labels. If no address label: give to Roger Parks to assign sequence number.	POST INTERVIEW NUMBER HERE ONCE INTERVIEW HAS BEEN CONDUCTED:	If leave mail questionnaire write new sequence number here:
	C_9	C_{10}

C_7 C_8 C_{11} Write address here if no label for this address and check here ____1

C_{12} IF NO INTERVIEW IS CONDUCTED AT THIS ADDRESS, Was lot:

1___vacant lot
2___unoccupied
3___commercial
4___respondent refused (write reason given for refusal on back of this sheet)
5___no one at home

C_{13} Number of call backs: Circle 1 2 3 4 5 6

C_{14} Was housing structure:

1___one family house
2___duplex
3___triple
4___four to six units
5___more than six units

C_{15} Rating of outside upkeep level:

1___excellent
2___good
3___average
4___slightly run down
5___run down

C_{16} Rating of inside upkeep level:

1___excellent
2___good
3___average
4___slightly run down
5___run down

C_{17} Fencing designed for security?

1____Yes 2____No

C_{18} Watch dog?

1____Yes 2____No

C_{19} Could you observe any special precautions the respondent might be taking as investment in private protection?

1____Yes X_1 What types: _____
2____No

IF INTERVIEW CONDUCTED

C_{20} Sex: 1____Male 2____Female

C_{21} Race: 1____Black 2____White

X_2 Position in household: _____

C_{22} Description of respondent's attitude: 1___Friendly 2___Neutral 3___Hostile

C_{23} Where was interview conducted? 1___Front door 2___Inside

C_{24} Number of interruptions: Circle 1 2 3 4 5

C_{25} Estimated interest level of respondent:

1___Very interested 2___Somewhat interested 3___Bored

Appointment:

Day/Hour of appointment -- or times at home

(Sample pages from St. Louis citizen questionnaire)

R-117

Interview Number for the day: _____

Indiana University
Center for Urban Affairs

Time at Beginning _____ C_{26} C_{27} Date of Interview _____

My name is _____. I'm from Indiana University. You probably received a letter during the past week telling you about our project concerning attitudes toward the police. We are talking with people from many neighborhoods in the St. Louis area. I would appreciate being able to talk with you for about 15 minutes to get your opinion on the police serving in this neighborhood.

C_{28} About how long have you been living in this neighborhood?

1 ____ Less than one year
2 ____ One to three years
3 ____ Four to five years
4 ____ Six to ten years
5 ____ Eleven to fifteen years
6 ____ Sixteen to twenty years
7 ____ Twenty to thirty years
8 ____ More than thirty years

C_{29} When you use the word neighborhood, what does it generally mean to you?

|READ|
1 ____ A few blocks around your home
2 ____ A distinct section of your city or town
3 ____ The whole city or town in which you live

X_3 Does this neighborhood have a specific name? _____ (write name)

X_4 What police department has jurisdiction in this neighborhood? _____ (write name)

|ASK ONLY IF LIVED IN NEIGHBORHOOD LESS THAN FIVE YEARS:|

C_{30} Where did you live before you moved here?

1 ____ Within the same city or neighborhood.
2 ____ Within St. Louis metropolitan area. X_5 Where? _____
3 ____ Somewhere else. X_6 Where? _____ (city and state name)

X_7 What do you like best about living in this neighborhood? _____

_____

X_8 What do you most dislike about living in this neighborhood? _____

_____

C_{31} Do you think crime in your neighborhood is:

|READ|
1 ____ Increasing
2 ____ About the same
3 ____ Decreasing

|DON'T READ|
4 ____ None
9 ____ Don't know

C_{32} When the police are called in your neighborhood, in your opinion, how fast do they come?

|READ|
1 ____ Very rapidly
2 ____ Quickly enough
3 ____ Slowly
4 ____ Very slowly

|DON'T READ|
5 ____ Not at all
9 ____ Don't know

C_{33} How many times do you think the police patrol this neighborhood during an average eight hour shift. . . .once every shift, twice a shift, or how often?

0____Nine or more times a shift
1____Seven or eight times a shift
2____Five or six times a shift
3____Three or four times a shift
4____Once or twice a shift
5____Several times a week
6____Once a week
7____Less than once a week
8____Never see them
9____Don't know

Now I am going to read to you a list of nine things that often affect how people feel about their neighborhood. What rating would you give the following in your neighborhood? Outstanding, Good, Adequate, Inadequate, or Very Poor.

|HAND RESPONDENT CARD: CODE BUT DO NOT READ NON-EXISTENT AS A RESPONSE|

	1 Outstanding	2 Good	3 Adequate	4 Inadequate	5 Very Poor	6 Non-Existent	9 Don't Know
C_{34} Schools and education							
C_{35} Parks							
C_{36} Police services							
C_{37} Upkeep of houses and yards							
C_{38} Garbage collection							
C_{39} Street repair							
C_{40} Police-community relations							
C_{41} Street lighting							

C_{42} Do you think police services in your area should be provided by:

1____A small community force directed by locally elected officials?
|READ| 2____A metropolitan wide force?

C_{43} |IF 2, READ:|

1____With a centralized administration
2____With a decentralized administration
3____Doesn't matter

X_9 Why?_____

_____

C_{44} In this neighborhood what type of crime do you worry about most?

1____None in particular
2____Burglary or theft
3____Robbery
4____Assaults and violence
5____Vandalism
6____Dope, drugs
7____Street holdups & muggings
8____Other_____

C_{45} Do you think it is a good idea for police officers to live in the neighborhood they serve?

1____Yes } X_{10} Why?_____
2____No
3____Doesn't make any difference _____

DO WORKSHEET NOW - INSTRUCTIONS ON BACK

INSTRUCTIONS FOR WORKSHEET

For the next two questions I'd like to hand you this worksheet and pen. (Hand Respondent Worksheet Now.) In the first question, we are interested in how serious you consider the following crimes to be, whether or not they occur in your neighborhood. Please rank the following list of nine crimes from the one which you think is the most serious to the one which you think is the least serious. Please place a 1 next to the crime which you feel is the most serious, a 2 next to the crime which you feel is the next most serious, a 3 next to the crime which is the next most serious and so forth through the list.

C_{46} Check here: _____1, if respondent mentions that any of the crimes listed on ranking sheet should not be considered crimes. Which ones: _____

_____

X_{11} When ranking sheet section is completed, begin instructions for budget section. We would like you to assume that <u>you</u> are in charge of deciding how the police should spend their budget on:

A. Patrolling
B. Detective Work
C. Administration

Indicate by dividing the police budget dollar into three separate sections -- the way you would like to see the police spend their budget. You can identify each section by writing the letter A, B, or C in the corresponding sector.

If respondent seems to be having difficulty: Suggest that the respondent think of it as cutting a pie into three pieces. The size of the piece will indicate how much of the budget he or she thinks should be spent on the activity.

We are interested in how serious you consider the following crimes to be, whether or not they occur in your neighborhood. Please rank the following list of nine crimes from the one which you think is the most serious to the one which you think is the least serious. Please place a 1 next to the crime which you feel is the most serious, a 2 next to the crime which you feel is the next most serious, a 3 next to the crime which is the next most serious and so forth through the list.

C_{47} _____Car theft

C_{48} _____Public intoxication

C_{49} _____A robbery of $100 in which the victim is not injured

C_{50} _____Use of marijuana

C_{51} _____Organized gambling

C_{52} _____Prostitution

C_{53} _____Use of hard narcotics

C_{54} _____A house burglary where $100 is stolen

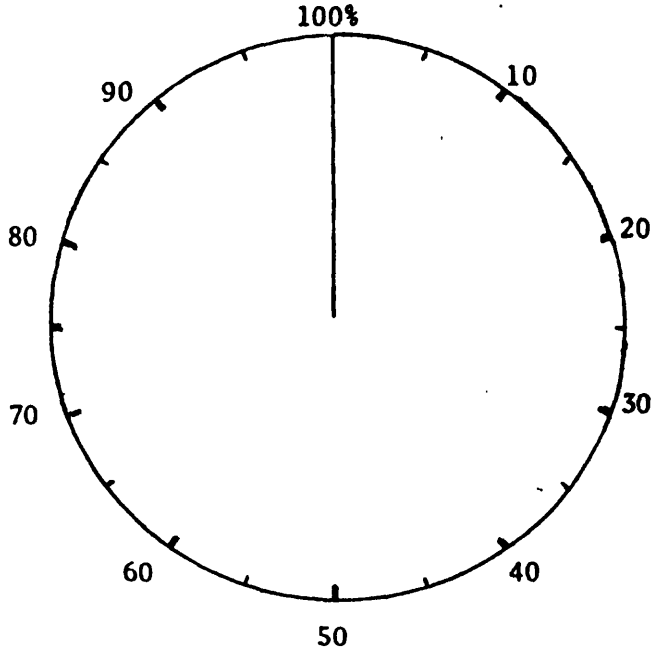
C_{55} _____A robbery of $10 in which the victim is slightly injured

---

Next, we would like you to assume that you are in charge of deciding how the police should spend their budget dollar on the following three activities:

A. Patrolling (crime prevention)
B. Detective work (criminal investigation)
C. Administration

Indicate by dividing this budget dollar into three separate sections the way you would like to see the police spend their budget. You can identify each section by writing the letter A, B, or C in the corresponding sector.



C_{56} Do you think your police should have special programs for improving their relations with citizens in this community?

1_____Yes
2_____No } X_{12} Record comments, if any:_____
3_____Doesn't make any difference

C_{57} In your opinion who should make the official decision about which police services are most important?

1_____Publicly elected officials
2_____The police themselves
3_____Citizens
4_____Others_____

C_{58} Do you think the quality of police services in other parts of the St. Louis area affects your safety here?

1_____Yes
2_____No } X_{13} |IF YES,| In what way does it affect your safety?_____

C_{59} Do you think your taxes should be used to help provide police services in poorer areas?

1_____Yes
2_____No } X_{14} Record comments, if any:_____

C_{60} Do you think that police serving your neighborhood sometimes use more force than is necessary? 1_____Yes 2_____No

C_{61} For your police department, are you in favor of hiring more policemen? 1_____Yes 2_____No

C_{62} Are you in favor of requiring new policemen to have some college education? 1_____Yes 2_____No

C_{63} How about providing more training for each policeman serving your community? 1_____Yes 2_____No

C_{64} Do you think that if police in tough neighborhoods had more leeway in the use of force, many crime problems in those neighborhoods would be reduced? 1_____Yes 2_____No

C_{65} How about in your neighborhood? 1_____Yes 2_____No

C_{66} How do you personally feel about having black officials in your community?

C_{67} How about black policemen in your community?

R-122

C_{68} Thinking back over the past twelve months, that is, since March 1, 1971, have you or any member of your household been the victim of any criminal activity? For example, has anything been stolen? Anyone been attacked? 1____Yes 2____No

C_{69} During the same period (March 1, 1971 to present) has there been any occasion when the police have assisted you or any member of your household? For example, any emergency sickness? Car trouble or accident on the road? 1____Yes 2____No

---

C_{70} FIRST OCCASION. . . . . Is this a victimization____1, or assistance?____2

X_{15} What happened?_____

X_{16} When did this happen?_____ (month-year)

C_{71} Was it in this neighborhood? 1____Yes 2____No

C_{72} Did you call the police? 1____Yes 2____No

X_{17} |IF NO,| Why not?_____

X_{18} |IF YES,| How fast did they come?_____ (in minutes)

C_{73} Did you call your own police 1____, or another force? 2_____ (which)

X_{19} What did the police do?_____

C_{74} Were you satisfied with what the police did? 1____Yes 2____No

---

C_{75} SECOND OCCASION. . . . . Is this a victimization____1, or assistance?____2

X_{20} What happened?_____

X_{21} When did this happen?_____ (month-year)

C_{76} Was it in this neighborhood? 1____Yes 2____No

C_{77} Did you call the police? 1____Yes 2____No

X_{22} |IF NO,| Why not?_____

X_{23} |IF YES,| How fast did they come?_____ (in minutes)

C_{78} Did you call your own police 1____, or another force? 2_____ (which)

X_{24} What did the police do?_____

C_{79} Were you satisfied with what the police did? 1____Yes 2____No

---

C_{80} How confident are you that the police serving your neighborhood can handle just about any police problem that comes up?

|READ| 1____Very confident 3____Not at all confident
2____Somewhat confident

C_{81} Do you think that your police are professional? 1____Yes 2____No

X_{55} Why do you think that?_____

Now I am going to read some statements about city government and the police. Would you tell me whether you strongly agree, agree, disagree, or strongly disagree with each of the statements. HAND RESPONSE CARD -- Check Response.

C_{82} The local government is concerned about your neighborhood.
1____SA 2____A 3____D 4____SD 5____I 9____DK

C_{83} Policemen in this neighborhood are basically honest.
1____SA 2____A 3____D 4____SD 5____I 9____DK

C_{84} A person can't get any satisfaction out of talking to the public officials in your community.
1____SA 2____A 3____D 4____SD 5____I 9____DK

C_{85} People here are not likely to call the police when they see something suspicious in the neighborhood.
1____SA 2____A 3____D 4____SD 5____I 9____DK

C_{86} The police in this neighborhood are generally courteous.
1____SA 2____A 3____D 4____SD 5____I 9____DK

C_{87} The police in your neighborhood treat all citizens equally according to the law.
1____SA 2____A 3____D 5____SD 5____I 9____DK

C_{88} During the past year, have you thought about complaining to a public official concerning any local public service (i.e., police, schools, garbage collection)?
1____Yes 2____No |IF NO, GO TO C91, NEXT PAGE|→→

X_{56} |IF YES,| What was the problem?_____

C_{89} Did you actually complain? 1____Yes 2____No

X_{57} |IF NO,| Why not?_____ |GO TO C91, NEXT PAGE|→

X_{58} |IF YES,| Who did you complain to?_____
(office or person complained to)

X_{59} What happened?_____

C_{90} Were you satisfied by the response? 1____Yes 2____No

X_{60} |IF NO,| Why not?_____

C_{91} Do you belong to or support a group or organization for mutual protection?

1____Yes 2____No |IF YES,| Name_____

X_{61} How does it work?_____

C_{92} |IF NO,| Do you know if such an organization exists in your neighborhood?

1____Yes 2____No Name_____

C_{93} Have you taken any precautions such as alarms or lighting systems to protect your home and family against crime? 1____Yes 2____No

X_{62} |IF YES,| What type of precautions?_____

C_{94} Have you been stopped by a policeman during the last year while you were on the street or driving a car? 1____Yes 2____No |IF NO, SKIP TO C99|

C_{95} |IF YES,| Were you stopped by your own force 1____, or another force? 2_____
(which)

X_{63} Why were you stopped?_____

C_{96} Was the policeman who stopped you White or Black? 1____White 2____Black

C_{97} Were you frisked? 1____Yes 2____No

X_{64} How were you treated?_____
(if any charge of mistreatment, get thorough details)

_____

C_{98} Were you taken to the police station? 1____Yes 2____No

X_{65} |IF YES,| How were you treated at the station?_____

C_{99} Do you know anyone who has been mistreated by the police during the past year?

1____Yes 2____No |IF NO, SKIP TO C102|

C_{100} |IF YES,| Was it in this neighborhood? 1____Yes 2____No

C_{101} Was it your own police force 1____, or another force? 2_____
(which)

X_{66} Please describe the incident._____

_____

C_{102} Do you have a close friend or relative who is a policeman? ____Yes 0____No

|IF YES,| How many?_____

C_{103} Other than a close friend or relative, do you know a policeman well enough to call him by name if you saw him on the street? ____Yes 0____No

|IF YES,| How many?_____

X_{67} Suppose money were available from a federal or state grant for one major improvement in law enforcement in your neighborhood. What one improvement should be made? _____

_____

C_{104} Considering the services provided by your local government, do you think the taxes you pay for them are:

[READ]
1____Too high for what you get
2____About right
3____Low for the services received
9____Don't know

C_{105} Are you a member of any organization concerned with neighborhood problems?

1____Yes 2____No [IF YES,] What is the name? _____

[IF YES]

X_{68} What neighborhood problems does it deal with? _____

_____

X_{69} If a local developer asked for a zoning change which you opposed, what would you do?

_____

_____

X_{70} Where do you get most of your information about local matters? _____

_____

X_{71} What newspaper do you take, if any? _____

_____

Now we will be asking a series of questions which are of a somewhat more personal nature. If you would prefer not to answer any of the following questions, please so indicate.

C_{106} What is the highest grade you completed in school?

1____No high school
2____Some high school
3____High school graduate
4____Technical or Business school
5____Some college
6____College graduate
7____Some graduate school
8____M.A.
9____Ph.D.

C_{107} Are you renting, buying or do you own? 1___Renting 2___Buying 3___Own

X_{72} [IF RENTING, ASK:] Where does your landlord live? _____

C_{108} What is your marital status? 1____M 2____S 3____D 4____W

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C_{109} Occupation of respondent _____
(write description)

C_{110}

01___Professional or technical work
02___Managers, officials, proprietors
03___Clerical & related jobs
04___Sales workers
05___Craftsmen, foremen, related jobs
06___Factory operators & related jobs
07___Private household workers
08___Unemployed
09___Service workers except private households
10___Laborer except farm
11___Teachers
12___Housewife
13___Retired
14___Policeman
15___Student
16___Other _____

C_{111} Occupation of head of household where different than respondent:

_____
(write description)

C_{112}

01___Professional or technical work
02___Managers, officials, proprietors
03___Clerical & related jobs
04___Sales workers
05___Craftsmen, foremen, related jobs
06___Factory operators & related jobs
07___Private household workers
08___Unemployed
09___Service workers except private households
10___Laborer except farm
11___Teachers
12___Housewife
13___Retired
14___Policeman
15___Student
16___Other _____

C_{113} Do you have any children living with you? _____Yes 0_____No

|IF YES,| How many? _____

C_{114} Year of birth: 18_____, 19_____.

C_{115} Do you have a religious preference? _____Yes 0_____No

|IF YES,| What is it? 1___Protestant, 2___Catholic, 3___Jewish

If uncertain about position in household, ASK NOW.

THANK YOU

X_{73} Time at end: _____

C_{116} Interviewer number _____

X_{74} First coder _____ X_{75} Second coder _____

RECORD OBSERVATIONS OF HOUSING QUALITY
WHEN CONDUCTING INTERVIEW:

INSIDE CONDITIONS OF DWELLING UNIT

1. Inside Walls and Ceiling:
   1_____no defects
   2_____small cracks
   3_____peeling paint or wallpaper
   4_____holes, loose plaster

2. Housekeeping:
   1_____clean and orderly
   2_____clean but cluttered
   3_____littered with refuse
   4_____littered with food wastes

INSIDE CONDITIONS OF COMMON HALLWAYS AND STAIRWAYS IN MULTI-UNIT BUILDINGS

3. Housekeeping of Common Hallways and Stairways
   1_____clean and orderly
   2_____clean but cluttered
   3_____dirty
   4_____littered with junk and garbage
   5_____not applicable

OUTSIDE CONDITIONS OF BUILDING AND PARCEL

4. Porch and Steps:
   1_____no defects
   2_____slight damage
   3_____shaky or unsafe

5. Outside Walls and Roof:
   1_____no defects
   2_____cracks in siding or roof covering, in need of paint
   3_____missing materials over small areas
   4_____holes, open cracks, missing materials over large areas
   5_____sagging and tilting structure

6. Windows:
   1_____no defects
   2_____broken or missing panes
   3_____rotted sash or frames

7. Littering of area in front of building
   1_____no litter
   2_____some litter but no glass or junk
   3_____large amount of litter, glass, and junk

8. Estimate of age:
   1_____0 - 5 years
   2_____5 - 25 years
   3_____25 years or more

R-128

(Police Questionnaire utilized in St. Louis study)

Indiana University
Center for Urban Affairs
Police Questionnaire

1. Sequence number 9-_____

2. Name of interviewer _____ Number _____

3. Day and hour of interview _____

4. Time at completion of interview _____

5. Where was interview conducted _____

6. Were there any other persons present? _____ yes _____ no

7. Number of interruptions: Circle 0 1 2 3 4 5

8. Description of respondent's attitude:

   1 _____ Friendly 2 _____ Neutral 3 _____ Hostile

9. Were the respondent's responses cautious?

   1 _____ Very cautious 2 _____ Somewhat cautious 3 _____ Open

10. Estimated interest level of respondent:

    1 _____ Very interested 2 _____ Somewhat interested 3 _____ Bored

11. Other comments

R-129

Indiana University **Police Questionnaire** Center for Urban Affairs

1. Department _____

2. Division _____

3. Rank

   _____ Command rank
   _____ Patrolman
   _____ Detective
   _____ Staff

4. Date _____

5. Year of birth _____ _____

6. Marital status _____

7. What is your father's occupation? _____

8. Race _____

9. Did you go to high school in this area? Yes____ No____

10. Do you live in _____? Yes____ No____

11. When did you join this department? _____

12. Have you ever served on any other police department? Yes____ No____

    [If yes] Where? _____ How long?_____

13. How many more years do you expect to work in this department? _____

14. What rank do you expect to have when you retire?_____

15. What kind of police training have you had?

    a. Kind _____
       Where _____
       When _____
       Length of training _____

    b. Kind _____
       Where _____
       When _____
       Length of training _____

    c. Kind _____
       Where _____
       When _____
       Length of training _____

    d. Kind _____
       Where _____
       When _____
       Length of training _____

16. Have you taken any college work?

No _____ Yes _____ Degree _____ Where _____

Major _____ or types of courses _____

About how many credit hours _____

17. Is there any other police training you would like to have or college work you would like to do? Yes _____ No _____

18. About how much time should recruits spend in a training academy before going to work on the job?

Number of weeks _____

Why?

19. In your opinion how much formal education should the department now require when recruiting new policemen?

_____ Prior education is not that important.
_____ A high school diploma (or G.E.D.)
_____ Some college courses.
_____ A college degree.

20. How much formal education should be required for supervisory ranks?

_____ Prior education is not that important.
_____ A high school diploma (or G.E.D.)
_____ Some college courses.
_____ A college degree.

21. Does training in an academy or recruit school really prepare an officer for experiences in the field?

22. How well do citizens in this community understand the job of the police?

Very well _____ Fairly well _____ Not too well _____ Not at all _____

23. Do people in this community generally cooperate with the police?

Yes _____ No _____

24. Do most citizens here believe policemen in this department are basically honest?

    Yes _____ No _____

25. Would you rate the quality of police service provided by your department to residents as

    Outstanding ___ Good ___ Adequate ___ Inadequate ___ Very poor ___ ?

26. What rating do you think the citizens in this community give the job the police are doing here?

    Outstanding ___ Good ___ Adequate ___ Inadequate ___ Very poor ___

27. Does their opinion influence your effectiveness as a policeman in this community? Yes _____ No _____

28. What is the best way for a policeman to gain the respect of citizens?

29. Do you think that there are some kinds of people that just don't respect police? Yes _____ No _____

    [If yes] What kind of people seem to lack respect for police?

    Why do you think they lack respect for police?

30. In their coverage of police activities here, are the newspapers supportive or critical? Supportive _____ Critical _____

31. Would you rate the cooperation of the prosecutor's office with the police as

    Outstanding ___ Good ___ Adequate ___ Inadequate ___ Very poor ___?

32. Would you rate the cooperation of the local courts with the police as

Outstanding ___ Good ___ Adequate ___ Inadequate ___ Very poor ___

33. What effects have Supreme Court decisions over the last ten years had on law enforcement here?

34. Is crime in your community

_____ increasing _____ staying about the same _____ decreasing?

35. Are most crimes committed by juveniles or adults?

_____ Juveniles _____ Adults

36. Are most crimes here committed by people who live here or by outsiders?

_____ Live here _____ Outsiders

37. Are most crimes here committed by whites or non-whites?

_____ Whites _____ Non-whites

About what % are committed by non-whites?

38. What crime do you think citizens here worry about most?

39. What in your opinion is the best thing this community could do to reduce crime?

40. Is the promotional system in this department fair to all candidates for promotion? Yes _____ No _____

41. What factor is most important in determining who gets promoted in this department?

What other factors count?

1. _____ 3. _____

2. _____ 4. _____

42. What factor should be most important in determining who gets promoted?

What other factors would you take into account?

1. _____ 3. _____

2. _____ 4. _____

43. Suppose money were available from a federal or state grant for one major improvement in law enforcement here. What one improvement should be made?

44. Are Region V federal funds being spent in the best way to improve law enforcement in this area? Yes _____ No _____

45. What would be an appropriate beginning annual salary for a patrolman in this metropolitan area? _____

46. How high should the top salary for patrolman be? _____

47. The following have been suggested as ways of improving law enforcement in this country. Would you favor or oppose:

a. Seeking chiefs and other top officers from outside the department?

Favor _____ Oppose _____ Strongly _____

b. Creating a national pension fund for police so policemen can transfer from one department to another without losing their pension.

Favor _____ Oppose _____ Strongly _____

c. Recruiting minority members to police forces in communities with minority populations.

Favor _____ Oppose _____ Strongly _____

d. Assigning to each patrolman his own permanent patrol car.

Favor _____ Oppose _____ Strongly _____

48. Do all members of this department have an opportunity to influence the policies of the department?

Yes _____ No _____

49. Do you consider the police in your department to be professionals?

Yes _____ No _____ Explain:

50. Some say a professional policeman is one who makes his own decision in the field. Others say a professional is one who follows commands according to strict discipline. Which comes closer to your idea of professional police work?

51. Sometimes police are accused of using more force than is necessary. Who is a fair judge of whether a policeman has used more force than was necessary?

52. If you were to choose a department to work for on size alone, how large a department would you prefer to work in? _____

Why?

53. Does this Department have formal or informal arrangements for cooperation with other departments in the area? Formal _____ Informal _____

With which departments _____

On what kinds of matters do you work with others?

54. What are the top three departments in the area? _____

_____

_____

What makes them outstanding?

55. Is the command and discipline found in a military organization a good model for a police department?

Yes _____ No _____

56. What is the minimum period of time a patrolman should be assigned to a particular beat before being moved to another beat?

57. If you encounter a family whose problems are leading to fights, is there anyone or group in the community you can refer them to for help?

Yes _____ No _____ Who _____

57. Continued.

Should a policeman be expected to do this? Yes _____ No _____

58. Some people say police should spend less time providing services to individuals and more time fighting crime. In your opinion, should policemen spend more or less time providing services to individual citizens?

59. How important is having a formal code of ethics in making a good policeman?

60. What steps should police be able to take to improve their work conditions?

61. Are you a member of any association of policemen? Yes _____ No _____

[If yes] What does the association do?

62. Do you subscribe to any police journals or magazines? Yes ____ No ____

[If yes] Which ones?

[If yes] How long have you subscribed to them?

63. What newspaper, if any, do you receive at home?

64. All things considered, how pleased are you with your decision to become a policeman?

_____ Very _____ Somewhat pleased _____ Regret decision

[Part II]

R-(135)

Indiana University | **Police Questionnaire** Part II | Center for Urban Affairs

Please read the following statements about police work and check the response closest to your own opinion.

1. The patrolman would do a better job if he had a clear, precise guideline to follow in handling cases.
   Strongly agree___ Agree___ Disagree___ Strongly disagree___

2. Patrolmen today have enough legal authority to do their jobs efficiently.
   Strongly agree___ Agree___ Disagree___ Strongly disagree___

3. If a patrolman in tough neighborhoods had fewer restrictions on his use of force, many of the serious crime problems in those neighborhoods would be greatly reduced.
   Strongly agree___ Agree___ Disagree___ Strongly disagree___

4. Police here would be more effective if they didn't have to worry about "probable cause" requirements in questioning or searching citizens.
   Strongly agree___ Agree___ Disagree___ Strongly disagree___

5. If policemen don't do something themselves about getting better pay, nobody will.
   Strongly agree___ Agree___ Disagree___ Strongly disagree___

6. Higher salaries is the most important factor in getting a better police force.
   Strongly agree___ Agree___ Disagree___ Strongly disagree___

7. Policemen have a right to organize and take steps to improve their working conditions.
   Strongly agree___ Agree___ Disagree___ Strongly disagree___

8. A policeman does the best job by following the orders of superior officers.
   Strongly agree___ Agree___ Disagree___ Strongly disagree___

9. Some people make it very hard for you to treat them courteously.
   Strongly agree___ Agree___ Disagree___ Strongly disagree___
   Examples _____
   _____

10. Walking beats are no longer a useful police practice.
    Strongly agree___ Agree___ Disagree___ Strongly disagree___

11. The police here could be a lot more effective if the politicians were not so influential.
Strongly agree___ Agree___ Disagree___ Strongly disagree___

12. In this country there is no real justification for public protest and dissent.
Strongly agree___ Agree___ Disagree___ Strongly disagree___

13. Policemen should live in the jurisdiction they serve.
Strongly agree___ Agree___ Disagree___ Strongly disagree___

14. People here are not likely to call the police when they see something suspicious in their neighborhood.
Strongly agree___ Agree___ Disagree___ Strongly disagree___

15. In order for a policeman on the street to be effective, he has to be able to decide on his own which laws to enforce.
Strongly agree___ Agree___ Disagree___ Strongly disagree___

16. There is available today the knowledge to enable policemen to handle almost any of the situations they face.
Strongly agree___ Agree___ Disagree___ Strongly disagree___

17. Please rank the following nine crimes from the one which you think is the most serious to the least serious. Place a 1 next to the crime which you feel is the most serious, a 2 next to the crime which you feel is the next most serious, and so forth through the list.

In terms of seriousness, how would <u>you</u> rank the following?

___ Car theft
___ Public intoxication
___ Use of marijuana
___ Organized gambling
___ A robbery of $10 in which the victim is slightly injured
___ Use of hard narcotics
___ Prostitution
___ A burglary where $100 is stolen
___ A robbery of $100 in which the victim is not injured

18. If you think the citizens in this community would rank these items differently, rank them here as you think they would.

___ Car theft
___ Public intoxication
___ Use of marijuana
___ Organized gambling
___ A robbery of $10 in which the victim is slightly injured
___ Use of hard narcotics
___ Prostitution
___ A burglary where $100 is stolen
___ A robbery of $100 in which the victim is not injured

Should any of the above not be considered a crime?_____

Which ones? _____

. In your opinion, which of the following arrangements is the best and which is the least desirable way to organize police for the whole metropolitan area? Place a B beside the best and a W beside the worst way.

___ a. the way it is now.
___ b. have a single department for the whole area.
___ c. leave the City of St. Louis as it is but consolidate the county departments.
___ d. leave the City of St. Louis and larger municipal departments, but merge the smaller departments with the County Police.
___ e. leave the City of St. Louis and the County as they are, but merge the smaller municipal departments with adjoining, larger departments.
___ f. leave the county the way it is, but divide the city into a number of smaller police districts controlled by officials elected by those districts.

20. In a department like yours, how much specialization is appropriate? Rate the following possible separate units of a police organization, indicating whether it is essential (E), useful but not absolutely essential (U), not necessary (N), a waste of resources (W).

___ 1. A specialized traffic division.
___ 2. A homicide division.
___ 3. A vice division.
___ 4. A research and planning division.
___ 5. An intelligence and organized crime division.
___ 6. An internal inspection division.
___ 7. A police community relations division.
___ 8. A detective division.
___ 9. A training division.
___ 10. A narcotics division.
___ 11. A juvenile division.

21. How well has your training and experience prepared you for handling the following:

	Very well	Fairly well	Not very well
a. family disturbances	____	____	____
b. civil disorders	____	____	____
c. traffic accidents	____	____	____
d. narcotics cases	____	____	____
e. court appearances	____	____	____
f. problem juveniles	____	____	____

(If you have any comments about any question or would like to explain any answer, feel free to use this space and the back of this page.)

R-(139)

ST. LOUIS STUDY

AREA CONTROL SHEET

	Project	Initial and Date
A.	Sample Drawn	
B.	Worksheets Made	
C.	Blocks Driven	
D.	Corrected Addressee Given to Olson	
E.	Corrected Worksheets Photocopied	
F.	Address Labels Received	
G.	Blue Sheet and Envelopes Labeled	
H.	Envelopes Mailed	
I.	Worksheets & Blue Sheets Bundled	
J.	Area Strategy Developed	
K.	Blue Sheets Assigned in the Field	
L.	Follow-Up Interviews Assigned	
M.	Area Finished	

This is the control sheet which we used for our St. Louis study. The steps in drawing a sample and getting ready for the field differ from study to study. However, if you have more than two study areas in which you are going to collect data from in-person interviews, you will need a worksheet something like this to keep track of your progress from sampling through completion of field work.

R-140

U 421 - Y 771
Elinor Ostrom
Spring, 1972
St. Louis Study

Area Description Worksheet

Area Name_____ Team Leader's Name_____

General description of the area_____

_____

_____

Name of Police Chief_____Phone number_____

Approximate date when contacted_____By whom_____

Any known neighborhood names within area_____

_____

_____

(Team leader please post to this section during survey if new names are discovered.)

Restaurants noticed in the area_____

_____

Gas stations with obvious telephones noticed_____

_____

This worksheet was filled out in the field by myself or by a research associate prior to sending teams of student interviewers into the field. It was then given to a team leader so that he or she had basic information at hand about the area in which the team was interviewing.

R-141

This form was filled out by myself or a member of the research staff prior to sending teams into the field. Team leaders were then provided a copy which they went over with the student-interviewer assigned to do interviewing on the block.

U 421 - Y 771
Elinor Ostrom
Spring, 1972
St. Louis Study

Block Description Worksheet

Area Name Wellston Team Leader's Name Yancey

Sequence numbers 303 Block number 05 CT 2140 CB 202

Any Mail Questionnaires sent? No

Streets bounding the block See Below

Approximate number of housing units 13

Approximate number of abandoned housing units 5

Predominant type of housing unit Single Family

Types of Commercial establishments, if any 6442 Spencer. On Williams a large warehouse or trucking firm. Check Sutter addresses and see if residence.

Number of apartment houses Could not see Sutter addresses well from car.

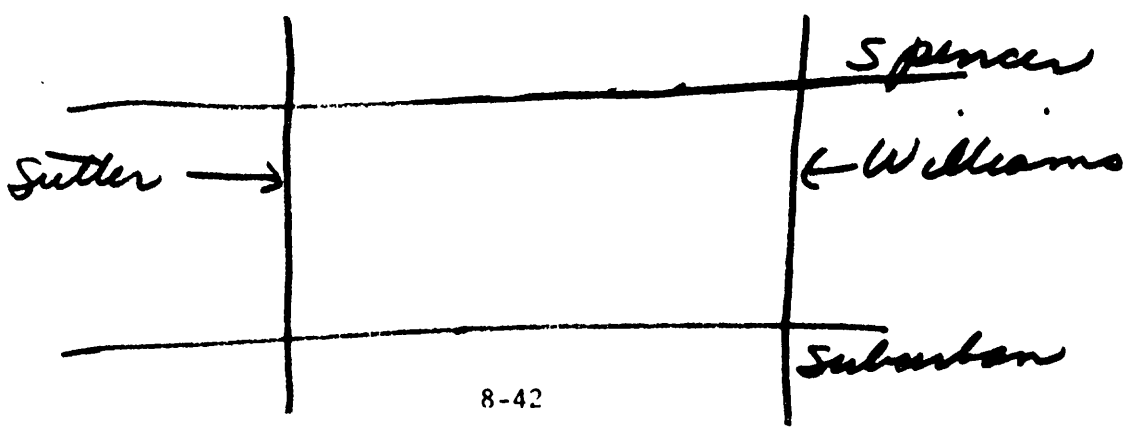
If a large apartment house, how to proceed in the field 0

Any potential problems Possibly - Several abandoned houses. Kids seemed friendly. One or . Several white respondents on the block.

Proportion Black in Census figures if have 52

Estimated proportion black respondents 52

Drawing of the block:



R 142

This form was utilized each day by each team leader in the field. The notation concerning pick-up places is particularly important. It is amazing how easy it is to forget where you agreed to meet someone after four or five hours of interviewing.

U421 - Y771
Elinor Ostrom

Team Leader Check List
St. Louis Study
March, 1972

Date: _____ 1972

Departure Time: _____

People in car: _____

_____

Arrived in Field: _____

Agreed Pick-Up Places:

Place	Time

Special Interviews to be conducted or appointments to be kept:

_____

_____

_____

_____

Number of attempted Interviews _____ Number of completed Interviews _____

Number of Males _____ Number of Females _____

Number of Future Appointments _____

Arrived back at motel: _____