

Basic Methods of Policy Analysis and Planning

Third Edition

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The Need for Simple Methods of Policy Analysis and Planning

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Our increasingly complex society confronts us with more and more difficult policy problems that are not easily solved.¹ Although these problems may be “attacked” or “addressed,” often they have no clearly correct answers. Some authors characterize the problems of modern society as “squishy,” “fuzzy,” “subjective,” and “wicked” and as often having the following attributes:

1. They are not well defined.
2. They are seldom purely technical or purely political.
3. Their solutions cannot usually be proven to be correct before application.
4. No problem solution is ever guaranteed to achieve the intended result.
5. Problem solutions are seldom both best and cheapest.
6. The adequacy of the solution is often difficult to measure against notions of the public good.
7. The fairness of solutions is impossible to measure objectively.

There are many examples of complex problems. What is the best location in a state for a maximum-security prison? Should a ban on phosphorus that has proven ineffective in improving water quality be lifted? A city council is considering offering tax breaks for developers willing to build offices in certain sections of

downtown. Should the mayor veto the plan? The county executive has proposed a \$190 million expansion of the metropolitan airport. Should the county board of supervisors support this plan? These problems will be answered: That is, decisions will be made. Even if the decision is to do nothing, it will still have consequences for citizens.

How will decision makers make their decisions? On the basis of what information will they act? To whom will they listen: lobbyists, constituents, policy advisers? The number of trained professionals employed in government and in the private sector to offer advice on these matters is growing. They usually call themselves planners, policy analysts, or public managers.

This book is for people who want to work in this area or who are working in this area and wish to improve their analytical skills. It is called *Basic Methods of Policy Analysis and Planning* because it is intended as the first book a beginning analyst will use in building a portfolio of methods to approach knotty public policy problems.

1.1 QUICK, BASIC POLICY ANALYSIS

We believe there is a *set of systematic procedures* or *policy analysis methods* that can be used to attack contemporary policy problems. We also believe there is a subset of these methods that are basic methods, yielding quick results and serving as theoretically sound aids to making good policy decisions. Some people might argue that the variety of public policy problems is so great that no one set of systematic procedures could be developed for dealing with all of them. Critics might also say that geographic and political contexts for these problems are so far-ranging that the problems don't have much in common, thus defying any standard approach. Yet a process for approaching these problems has evolved and has been applied.

Called the *rational model*, one simple version takes the form of Figure 1.1, in which problem definition leads to the identification and evaluation of alternatives followed by policy implementation. There is evidence that when time and resources are available, the analytical process does take this or an acceptably similar form. Most often, however, this rational problem-solving process is not followed because of the pressures of time, limited knowledge, and constrained resources.

This book is different from others in that we present only quickly applied methods, those that can be useful when there is no time for researched analysis. Policy analysts are often required to give advice to policy makers in incredibly short periods of time, in contrast to university researchers and think tank consultants who are hired specifically to conduct intensive research on public policy issues.

Some have called this latter type of work *policy studies* or *policy research*. Analysts doing this work are typically given comparatively large budgets and long periods of time to produce results, and they work with large sets of data. Consequently, the methods they use are different from those used by staff members who work for decision makers on a day-to-day basis. The terms *researched analysis* and *quick analysis* were coined to describe this difference.² Since we have

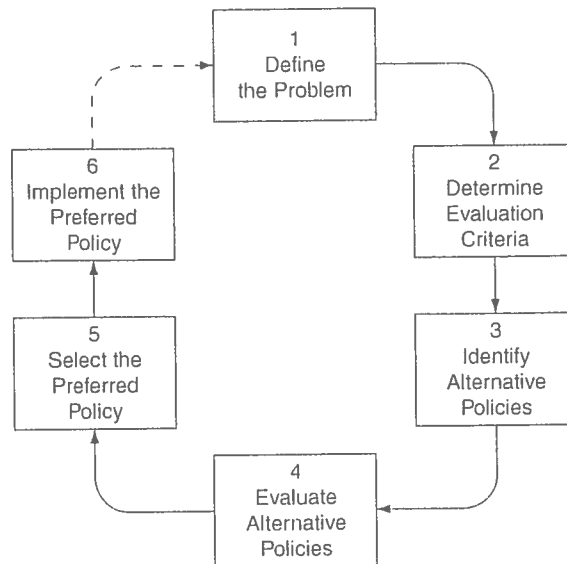


FIGURE 1.1

The Classical Rational Problem-Solving Process

included in this book only methods that we feel are both quick and theoretically defensible, we consider them to be highly useful for completing a short-term assignment or for taking the first cut at a longer-term project. Thus, we call them **basic methods**, and the product of their application **basic analysis**.

The goals of persons who produce *researched analysis* are different from those of persons who produce basic analysis. Certain to be critically reviewed by their peers, researchers seek the truth behind problems and nonintuitive, or even counterintuitive, solutions. Fellow researchers are impressed with the complexity, elegance, and precision of the analysis.

For *quick, basic analysis* the goals are much more practical. The goal may be simply to inform public decision makers well enough so they don't get caught in major errors. An example might be to assist the mayor of a large city who must decide whether to side with the director of public works in defending the cost of garbage collection when an opponent claims the cost to be double that of other cities of comparable size.

Somewhat more idealistically, the goal might be to inform decision makers well enough so that a more enlightened discussion of public policy occurs and better policy is adopted as a result. On a practical level, quick, basic analysis may be all that is justified for a one-time local problem where the cost of a large-scale study would exceed the benefit from the precise solution or where for political reasons the best technical alternative has little chance of being adopted.

The process of basic analysis is much more complex, in some respects, than that of researched analysis. **Researched analysis** is rather well codified; there are routine steps of exploration and accepted standards of scientific behavior. On the other hand, the most compelling feature of basic analysis is whether the consumer understands it, is able to follow its logic, and as a result is able to formulate better

policy. This means that there is interplay between the basic analytical routines themselves, the process for interacting with clients, and the communications tools used to convey the results of analysis. This is why some authors describe basic analysis as craft rather than science. Success is measured by the quality of public debate and the efficacy of the policy adopted. Therefore, basic analysis must be responsive to the policy problem. Methods must be selected for their ability to attack the client's problem in the time available without obfuscation.

Much has been written about the differences between policy analysis and planning. To avoid a tortuous review, we will highlight what is important for users of this book. Some might say that the differences are well described by the phrases *researched analysis* and *basic analysis*, with planning being the former and policy analysis the latter.

This, like other simple dichotomies sometimes proposed, is inadequate. First, were the pertinent literature in both fields to be reviewed, one would find that policy analysis has concentrated primarily on problems of the federal level of government, while planning has focused on those of state, regional, and local levels of government. Although this is an accurate statement about the literature, this dichotomy, too, has relatively little meaning for our purposes. State and local governments adopt policies, and the federal government often develops plans.

Some critics would say that policies are more broad and abstract, require more information and analysis, and have wider ramifications than plans, but others would argue the opposite. The answer depends on the level of government: One's tactics may be another's policies and yet another's plans. This semantic difference is not very important. Most practicing planners and policy analysts use both basic methods and researched methods in their work, whether that is in public or private practice.

More telling perhaps is the historical development of each field and the resulting differences in the paradigms of the fields processes.³

Classic comprehensive planning includes the following elements:

1. An extensive inventory phase, usually for gathering data on the natural geography and environment, on the physical infrastructure, and on the demographic and economic characteristics of the resident population
2. A search for alternative solutions, which may be described as exhaustive, but in fact is severely constrained, with significant alternatives eliminated before presentation to the client (the public)
3. The preparation of a plan
4. An unspecified client: "the public interest"
5. A subject-oriented, as opposed to a problem-oriented, scope (e.g., the transportation system versus congestion of the downtown loop)
6. A rather long time horizon (at least ten years)
7. An apolitical approach to the process of implementation

Policy analysis, on the other hand, includes this parallel set of characteristics:

1. An inventory or search phase, limited in scope and directed at a particular issue
2. A constrained search for alternatives, which are then all usually evaluated and displayed to the client
3. The preparation of memoranda, issue papers, policy papers, or draft legislation

4. A particular client, be it a chief executive, an elected official, a public interest group, a neighborhood, or a bank, likely to have a particular perspective on the problem
5. An issue or problem orientation, described alternatively as a reactive posture
6. A time horizon often compromised by terms of elected officials and uncertainty
7. A political approach to getting things accomplished

The comprehensive planning process has more in common with researched methods, and the policy analysis process has more in common with basic methods. However, several additional points should be made.

First, policy analysis is, in a sense, only part of a larger policy planning process. Analysis itself is the breaking up of a policy problem into its component parts, understanding them, and developing ideas about what to do. Many activities beyond analysis are involved in the policy development process, and the term *policy analysis* may often be used when *policy planning* would be more appropriate.

Second, the two descriptions suggest that policy analysis is much more reactive than planning, always happening after someone has spotted a problem or proposed a solution. This is a reality of policy analysis at present; it may be a result of a shortage of resources for analysis in government. Someone must take the first step in creating or designing the plan, policy, or program, and this role of the professional planner in government has been severely neglected.

Third, planning is conducted because of the concern for the appropriate use of resources in the long run and the concern for the larger public interest. As noted above, the policy analysis paradigm specifies work for a single client. That client might be an embodiment of the public interest, like a mayor taking a particularly heroic stand on an issue seen as vital to city residents. Or the client might hold a very personal agenda, like reelection, that could well work in opposition to the public interest.

Finally, our reason for including *policy analysis and planning* in our title was not to imply that we would cover researched methods as well as basic methods. To the degree that the two can be separated, we will cover only basic methods. Rather, we chose our title because the activities of policy analysts and planners in state and local governments are the subject of this book. How the professional label reads is moot.

1.2 LEARNING THE METHODS OF POLICY ANALYSIS AND PLANNING

Methods courses are usually taught by supplying students a toolbox of analytical techniques (e.g., forecasting methods and regression analysis) that can ostensibly be applied to policy problems. There are many drawbacks to this approach. It creates the sense that all that needs to be done is to discover the proper match between problem type and specific method and then crank out a solution.

This is seldom the case. It also fails to acknowledge that the complex problems facing governments are usually multifaceted and require multiple, not single, analytical approaches. Problems examined this way usually lose their context and become mathematics problems rather than policy problems.

In reaction to this approach to learning methods, some have said that since each problem is unique, what is needed is a “proper frame of mind” to do analysis. In other words, there is no standard method that can be used to approach these problems; each time an approach must be created new. Our position lies between these two. We believe that a standard procedure exists for addressing these problems. We also believe that a number of fundamental or basic methods can be used within this procedure to analyze complex problem. We have brought these basic methods together in this book for the beginning policy analyst.

We believe these basic methods cannot be effectively learned without a context. Thus, in the first part of this book we describe the process of policy analysis and planning and explain a number of basic methods appropriate to each step in that process. Each method is illustrated with examples. The end of each process chapter contains practice problems.

The second part of the book contains policy cases, which will take from 10 to 20 hours each to resolve. For each policy case, unlike the more directed exercises provided with the process chapters, readers are on their own in delineating the problem, choosing an approach, and adopting methods of analysis. This combination of traditional learning and learning by doing was selected with several goals in mind.

We hope each user of this book will:

1. Learn to recognize situations in which specific basic methods can be applied quickly and appropriately
2. Become competent at using methods of analysis and designing approaches to policy problems
3. Learn how to communicate the results of analysis to appropriate decision makers

We hope that in the process of attaining these goals our readers will also:

- Learn the language of policy planning
- Learn to write with organization, clarity, and precision
- Learn to use supporting documentation (maps, charts, graphs) effectively
- Learn to speak publicly, delivering critical information concisely
- Learn to develop simple models that are supported theoretically and empirically
- Learn to evaluate the distributional aspects of policies and programs
- Learn to incorporate political factors into analysis
- Learn to advocate uncomfortable positions
- Learn to work under time constraints and to allocate analytic resources
- Develop management skills and the ability to work in, and/or direct, a team
- Learn how to obtain policy-relevant data through efficient search techniques and persistence
- Practice the sifting and synthesizing of mountains of seemingly irrelevant reports and memoranda
- Practice using secondary data sources
- Develop quantitative analytic skills
- Develop skills for qualitative analysis
- Learn to design effective program implementation guidelines

- Learn to cope with uncertainty in a policy context by being flexible and tolerating false starts and dead ends
- Learn to read and understand legislative language
- Learn how to develop a program of researched analysis for staff
- Learn to be skeptical of their own solutions as well as those of other analysts

Some people might argue that these skills are best learned on the job. We contend that because a standardized process has emerged and because practitioners of policy analysis and planning have developed a number of basic methods, it is more efficient to learn and practice these methods before facing them in real life.

What role do other courses play in learning to do policy analysis? For those who expect to work on state and local government problems, two other streams of learning, besides methods, are important. The first is the process of policy making and planning. How do governments work, laws get passed, and administrative rules get initiated? How do professionals within organizations function in providing analysis and advice to decision makers, be they elected or appointed officials? How can the process of analysis involve various constituencies and public and private groups? Courses in planning, government, administration, and management as well as some interdisciplinary programs are directed toward these concerns.

The second essential element is knowledge of the economic, geographic, and social structures of urban and regional systems. How do cities and regions grow and decline? Which of their problems might be addressed by governments? Courses in urban and regional economics, human ecology, sociology, geography, and interdisciplinary offerings address these questions.

The analytical methods portion of a planning or policy analysis curriculum usually involves courses in descriptive and inferential statistics, management and analysis of large data sets, and courses containing a potpourri of researched analysis techniques such as survey research methods, linear programming, benefit–cost analysis, input–output techniques, geographic information systems, modeling, and simulation. Some curricula offer courses containing more generic methods for policy analysis and planning, such as forecasting and prediction, alternatives generation, and techniques of program monitoring and evaluation.

This text should be used early in the analyst’s career. After learning basic methods of policy analysis and planning, the analyst will be ready to move on to coursework in more advanced analytical techniques and techniques of researched analysis that require more time and resources, and usually larger basic information and data sets.

1.3 PRACTICAL PRINCIPLES FOR BEGINNING POLICY ANALYSTS

Learning how to approach policy problems and how to choose appropriate basic methods during the policy process takes time. There is no substitute for practice. Our first bit of advice, then, is to begin thinking like analysts and planners. As you read the daily news, reflect on the problems confronted by governments and non-governmental actors engaged in public policy and planning. Ask how you would

approach those problems, what information you would need, and what basic methods might be appropriate. Over time, as you develop the habit of looking at policy problems analytically, you will gain confidence in your ability to understand such problems.

The following suggestions should help as you begin to undertake policy analysis.⁴

1. Learn to Focus Quickly on the Central Decision Criterion (or Criteria) of the Problem. What factor of the problem is most important to your client? On what criterion is the decision likely to be made? Will it be minimizing the cost of some service? Or might it be to spend more effectively the funds now allocated to the activity? Perhaps it will be to broaden the base of those being served by the program. On what basis can we judge the merits of alternative policies or programs? Identifying the central “nugget” of the problem is essential. In the case of Underground Atlanta (Chapter 16), for example, you will be forced to confront the many possible objectives, implicit and explicit, that are part of that major public/private festival marketplace development.⁵

In some cases the criterion can be inferred from legislative intent; in others you might have to exhume it from a mountain of seemingly patternless reading material. When working on exercises or case studies, you will have no real client from whom to extract “the nugget.” On the other hand, the client often has no idea what the central decision criterion is. The difficulty is that public policies often have multiple and competing objectives, and the objectives are often extraordinarily ill-defined. Beginning analysts must learn to focus quickly, or valuable analytical time will be wasted.

If beginning analysts are to survive, it is essential that the sea of ambiguities—extensive reading material but none with priority, reams of undifferentiated data, the blank writing pad, the motionless pencil, and the screen with the blinking cursor—be recognized and overcome. Getting started is difficult, but focusing on the central decision criterion will help to identify needed information. It is better to make a bad start than to make no start. You can and should recycle: After several hours of work, does your central decision criterion still ring true?

There are, of course, dangers in choosing the nugget prematurely. There is a tendency to choose the one that can be defined and measured most easily (e.g., least cost) while possibly ignoring more important but less quantifiable goals and impacts and forgetting about who pays and who benefits from the policy. There is also a distinct possibility that several competing and equally valid decision criteria exist, and that early focusing will dismiss the alternatives forever.

2. Think about the Types of Policy Actions That Can Be Taken. There are various direct and indirect actions that governments can take to address public policy issues when the private market or government does not allocate goods efficiently or there are equity or distributional problems. Some actions involve monetary policies; others involve nonmonetary policies.

As a planner or analyst you should understand the range of potential policies, even though policy instruments are typically selected because of familiarity, traditions, or professional biases.⁶ Several schemes have been proposed for categorizing these types of policy actions.⁷ O'Hare's conceptualization is useful in helping to categorize the types of actions that might be taken.⁸ We have adapted that conceptualization as Table 1.1. We suggest that when faced with a policy

TABLE 1.1**Types of Policy Actions**

	Direct	Indirect
<i>Monetary</i>	Provide Purchase	Tax Subsidize
<i>Nonmonetary</i>	Prohibit Require	Inform Implore

Source: Adapted from Michael O'Hare, "A Typology of Governmental Action," Copyright © *Journal of Policy Analysis and Management* 8, no. 4 (Fall 1989), 670; reprinted by permission of John Wiley & Sons, Inc.

issue, you use this direct or indirect and monetary or nonmonetary framework to help you identify possible policy actions.⁹

Within the category of direct monetary policies, a government can directly provide a good or service itself through bureaus, departments, corporations, or special districts, such as fire and police protection, education, and recreation. A government can also purchase (often referred to as contracting) such a good or service from the private sector, other governments, or the nonprofit sector, or it can license an organization to provide the service. Governments can allocate, stockpile, ration, or auction these goods or services as well.

In the area of indirect monetary policies, governments can enact commodity and excise taxes, tariffs, fines, quotas, or fees, or they can establish pricing mechanisms. They can also provide compensation, subsidies, welfare payments, vouchers, grants, loans, tax credits, exemptions, insurance, or similar mechanisms.

Direct nonmonetary policies include the prohibition or restricting of actions by rules, regulations, standards, quotas, licensing, deregulation, or legalization, such as environmental laws and safety regulations. Governments can also require certain actions, although there are very few policies that can truly require action; rather, they are prohibitions that look like obligations. O'Hare argues that the only real obligations in U.S. society are compulsory education, jury duty, and revealing ourselves to the census.¹⁰

Indirect nonmonetary policies include educational, informational, and promotional efforts (public relations campaigns) to modify behavior. They also include stronger measures to cajole or implore. Think of efforts to discourage teenage smoking or drug use.

In Chapter 15 an environmental group has proposed a tax on plastic shopping bags. First you must confirm the goals of intervening in the market. What was the intent of the environmental group? Then review the range of policies and combinations of policies and how they might attain the stated objectives.

Rarely do alternatives fall cleanly into only one category. More often they fall into two or more categories, and generic policies must be customized to fit particular situations. In addition, each policy may have limitations and drawbacks in the intended application that must be addressed. It is, nonetheless, useful to have this classification scheme in mind when thinking about potential policies.

Moreover, as O'Hare pointed out, there is decreasing certainty in the effectiveness of the policy actions as we move from the upper left to the lower right of Table 1.1. When the government provides or purchases a good, the outcome is relatively certain. When we adopt policies based on education or cajoling, the outcome is less certain.¹¹

3. Avoid the Toolbox Approach to Analyzing Policy. Some disciplines specify analytical routines in detail for many circumstances. This may encourage some people to begin work on a policy problem because it lends itself to their favorite method. Ideally the problem should dictate the methods, not vice versa. This book is intended to help avoid the toolbox approach. Because problems are complex, beginning analysts can be very apprehensive about which method to use. We advise using the simplest appropriate method, and using common sense to design a method if one doesn't already exist. Combine methods if you must. Use more than one whenever possible. Apprehension often forces us back to the methods with which we feel most comfortable, but try to avoid this tendency.

The principal tools of the policy planner are logic, common sense, and experience with particular substantive areas. It helps to be practiced in data analysis, rational problem solving, and other specific skills. But more often than not we design our own approach or methodology to policy problems. This kind of creativity becomes easier the more policy analysis we do and the more we learn what the clients, be they real or simulated (in exercises and cases), find understandable and useful to their deliberations. If the methods applied are not transparent, the client is forced to either accept or reject the results without understanding.

In Chapter 11 you will be asked to analyze whether an owner of a number of large apartment complexes has discriminated in his rental practices. Invariably, a few students are familiar with the social science literature on discrimination as well as formal measures of racial segregation. Some will attempt to force their use on this problem, usually with poor results. In fact, this case presents a great opportunity to invent your own method, based on a sound concept of discrimination, and to use it in analyzing the situation and explaining it to the client.

Doing the exercises and completing the cases in this book, seeing others' approaches to the same problems, and understanding the deficiencies of one's own methods are efficient ways to obtain experience in policy analysis.

4. Learn to Deal with Uncertainty. Neophyte analysts are tempted to isolate each parameter of a policy problem and then establish the parameters' most likely future values. Having tacked down the key parameters of the problem (because the task is never-ending, many spend most of their allocated time on this phase), they believe the problem can be solved. This approach is often a waste of time. Therefore, we describe basic methods of decision analysis and sensitivity testing that can aid in analyzing important parts of a policy problem even if you cannot find values for certain variables.

This will be illustrated with a popular policy question: Should a city waive property taxes for a number of years on certain downtown properties in order to encourage their redevelopment (versions of these policies are tax increment financing or tax allocation district policies)? Our experience shows that most beginning analysts spend all their time trying to find out (for sure) whether the tax abatement will cause the development. Almost no time gets spent trying to analyze what the

costs and benefits of such a program would likely be if it were instituted and did or did not cause development. Learning to live with and work with uncertainty is a must for policy analysts. Uncertainty is present in nearly every public policy problem.

In Chapter 10 you will be asked to give advice on whether to put a parcel of downtown land up for bid or to build a city-owned parking garage on the site. Even in this very simple urban policy problem, uncertainty permeates. Handling that uncertainty, and giving good policy advice despite it, will be a significant challenge for you.

5. Say It with Numbers. Much of this book deals with using numbers to understand and resolve problems. Most policy problems have an associated database and it is important to use these data in gaining insights about the problem. The most basic mathematical operations—addition, subtraction, multiplication, and division—can yield powerful insights.

Division, for example, can tell you how much a service costs per capita. When analyzing the case on solid-waste collection (Chapter 12), you will undoubtedly want first to perform a number of simple mathematical operations. How much garbage is collected in how much time? By crews of what sizes? Using how many of what kinds of trucks? In streets or in alleys? Using what type of trash container? Compared to other cities, how do these numbers look? High, low, equivalent? What critical data are obviously missing but essential to this first-cut analysis? What about recycling and yard waste collection?

Of course, not all critical factors can be measured empirically. Some are intangible, but this does not necessarily make them unimportant. Even if, in the last analysis, intangibles are found to be central, the quantitative analysis will supply a good base upon which other analyses can be done. Carol Weiss made the point this way:

Any participant who has no data or evidence to support his/her group's position is at risk of being brushed aside; any group whose case rests on faulty data or flawed analysis can be more easily overwhelmed. Of course, the existence of powerful patrons and supporters can rescue even an analytically weak case, but where many groups vie, where power is roughly equally distributed, or where important actors have not yet taken a stand, analytic evidence is often of significant value.¹²

6. Make the Analysis Simple and Transparent. Does the analysis inform your clients? Do they understand it and as a consequence make better decisions? These central questions should be asked about any policy analysis. To achieve these goals, the analysis must be *simple*. This doesn't mean simple-minded, but rather, not complex, convoluted, or impossible for a bright, well-informed client to follow.

Transparency is another attribute of effective analysis. This means that if any models or calculating routines are used, the client should be able to see how they work, step by step, not simply be given the results of the internal machinations of a "black box." Simplicity and transparency go hand in hand.

Using a gravity model to predict retail sales provides a good example of this principle. In judging the impact of a proposed suburban shopping mall on the downtown of a medium-sized city, planners employed a typical gravity model to assess changes in shopping patterns (Table 1.2). Those familiar with such models

TABLE 1.2**Reilly's Law of Retail Gravitation Applied to the Upland Mall**

SIZE OF PROPOSED MALL	RESULTING DISTRIBUTION OF ANNUAL RETAIL TRADE		
	Downtown	Mall	Other
Don't build	\$89 M	\$0 M	\$27 M
Build 10,000 square feet	\$78 M	\$22 M	\$22 M
Build 20,000 square feet	\$56 M	\$67 M	\$17 M
Build 40,000 square feet	\$33 M	\$100 M	\$13 M

M = Millions of dollars.

will know that the results shown in Table 1.2 are the product of running data through a mathematical formula, a formula whose various parameters should be clear and transparent and open for discussion, criticism, and possible testing with data by others. The mall is both generating more total business and drawing business away from elsewhere, including downtown.

Unfortunately, Table 1.2 shows only the results of analysis. To be consistent with our principle, the factors in the formula need to be defined, the data used to generate the results should be listed, and a rationale for using this model in the given context should be provided. In some reports the analyst may want to confine such detail to an appendix, but it should always be made available so that consumers of the analysis can follow the logic and check the factors being used and their measurement. If it is too complicated to explain, it should not be used in analyzing policy.

In Chapter 14 you will be asked to develop a mathematical formula to allocate a state project budget to the many counties of that state. The funds are to be used to assist the elderly and poor with their energy bills. There are endless numbers of indicators of the counties' needs for these monies, and countless possibilities for expressing these needs in a formula. However, you will want to develop a formula that is, at the same time, intellectually defensible, political acceptable, efficient, effective, and yet understandable to the appointed and elected officials who are the clients for your analysis.

7. Check the Facts. It is important to develop a healthy skepticism for widely held beliefs and established facts in matters of public policy. Such beliefs and facts have a way of becoming baseline information for anyone who begins to study policy problems. Yet they are not always reliable. It takes time to feel confident enough to challenge existing authorities, but uncovering erroneous or uncorroborated facts can prevent your analysis from compounding the error.

A few tips for checking the facts include the following:

1. Analyze the sources of the facts. Is the position of the author served by the facts?
2. Never rely on a single source. Use people, reports, and the analysis of others to corroborate the facts. Use independent sources.
3. Understand how the facts were generated. If the method wasn't clear, discount the facts greatly.

4. Since you can't check everything, check the facts most closely associated with the central decision criterion.
5. Since facts often depend on definitions, check the critical ones. If the claim is that a majority of all city families are in poverty, how are *majority*, *city*, *families*, and *poverty* being defined and measured? Can you generate the same facts by using these definitions and assumptions?

Many planning and policy analysis issues revolve around population projections. Too often the projections of prestigious agencies are taken as facts and become bases upon which other analyses are performed.

For example, in one case a smaller city within a metropolitan region had done this by relying on the projections of a respected regional planning agency. The regional totals were projected objectively, with the agency using the latest birth, death, and migration rates. These totals, however, were allocated to communities on the basis of the regional agency's plan. The plan itself was at odds with what had been happening for the previous decade. The plan was designed to encourage centrality and dense development, but the region was becoming more spread out and more decentralized. The plan was a normative statement about the agency's desired growth pattern, but the agency had no power to implement its plan. The resulting population projection for the small city was, then, much higher than could be expected. Until a sharp analyst reviewed the fact base (including the population projection), analyses were being done under the assumption that the agency's city-level projections were a forecast of trends.

8. *Learn to Advocate the Positions of Others.* There are three principal reasons that taking a position different from your own can be beneficial. This is not to suggest that analysts should be amoral. Rather, your willingness to advocate other sides of the issue can have several positive results:

1. It can raise the level of debate, bringing out the merits of both sides and displaying the problem and alternative solutions in all their complexity. This can help lead to compromises, where if left as simple arguments or arguments based on clashing values alone, the problems may remain irresolvable.
2. This approach can improve your analytical skills and your facility with unfamiliar subject material, in the process perhaps causing you to reexamine what you have considered to be established truths.
3. This approach can also strengthen the tradition of an advocacy process where a strong challenge to an established policy—even a good policy—can result in a better policy. Competitive or advocacy processes are built into some of our most important institutions: the courts, Congress, and free enterprise. These systems rely on conflict in order to function, and their achievements would be far fewer if they had to wait for consensus or had vested a single entity with the responsibility to take a comprehensive view.

Analysts should take the opportunity to learn from lawyers whose professional training teaches them to assume either side and to play within the rules of the legal and political process. Majone believes that a "policy analyst is a producer of policy arguments, more similar to a lawyer . . . than to an engineer or

scientist.”¹³ He further argues that there is nothing intrinsically wrong with putting together a convincing argument, and if analysts are unable or unwilling to provide such arguments, decision makers will look to others for assistance.¹⁴

Learn to make up for a lack of substantive knowledge—in housing, health, environment, transportation, land use—by substituting an efficient learning process. Like lawyers, students of policy analysis need to be able to develop a case from any perspective and with limited prior substantive knowledge of the problem area. Policy analysts need to know how to learn efficiently about substantive problem areas because most analysts will encounter problems that shift during their lifetime, if not daily.

In Chapter 11 you will be working for the owner of many apartment complexes. He has been accused of discrimination in his rental practices. Many policy students’ first reaction to this case is to assume the landlord violated the fair housing policy. After all, housing segregation is a reality in most cities in the United States. Thus, the students would rather work against this businessman than for him. But the assignment is to work for him and to represent his interests the best you can. You will learn firsthand how a statistical argument is constructed, and you will be forced to analyze your own ethical standards in the process.

9. Give the Client Analysis, Not Decisions. Policy analysts and planners usually give advice to their clients; they do not make decisions for them. This has important implications for the types of analyses that are done and, even more importantly, for the methods of communicating the results of analysis. The client will make the final choice and should be able to reanalyze the policy data. This means that critical assumptions, values, and uncertainties must be reported. When the analysis is done well, the decision maker will be able to weigh the consequences of changes in assumptions, values, and uncertainties and come to an independent conclusion. In some cases the client will be seeking a recommendation, but this is typically the case only with skilled analysts who have developed a long-term relationship with their client.

In Chapter 13 you will be asked to develop policies for parking on a college campus. Because most college students have been directly affected by campus parking policies, those working on this case usually cannot resist offering their preferred solutions to the problem. However, the case should serve to remind you that no matter how personally you might be involved in a case, you should offer your client (in this case the State University) analysis, and maybe recommendations, but never decisions. In many cases, students offer only one solution to the problem, leaving no options for the president.

This point about providing analysis rather than decisions can be sharpened with an illustration. In one case, it was proposed to build a bridge to replace an existing ferry service over a river that separated the downtown of a major metropolitan area from its hinterland. The analysis showed that the critical variables in deciding between the new bridge and maintaining the existing ferry were the amount of time saved by commuters and how it was valued, the uncertainty of the cost of the bridge, and the assumption that traffic would remain at levels that could be adequately served by the existing ferry fleet. Good analysis would detail

these factors for decision makers and assess the consequences of varying assumptions about each. Poor analysis would simply recommend action. The key is learning to present detailed information in a format that decision makers find understandable and persuasive.

10. *Push the Boundaries of Analysis beyond the “Policy Envelope.”* Often problems come in very circumscribed forms. Someone has already decided what the problem is and what the alternative solutions are. The analyst may be able to expand both the problem definition and alternative solutions. For example, if traffic congestion is the specified problem and three alternative freeway locations are the possible solutions under consideration, a good analyst might raise questions concerning overall traffic efficiency and equity and advocate adding several mass-transit options to the freeway alternatives. For new and junior analysts this may not be possible, but at least the bounds should be explored. If the results are good, consider introducing them into the formal analysis. A major portion of our potential contribution is taken from us if we are handed the problem definition. Almost nothing remains if we are also given the allowable set of alternative solutions.

In Chapter 15 an environmental lobbying group has proposed a tax on plastic bags. As a policy analyst you should examine the intended purpose of that tax. What result was it expected to achieve? Then you should push the boundaries of the analysis, not simply recommending yes or no on the proposed tax, but analyzing other policy tools and alternative definitions of the problem.

11. *Be Aware that There Is No Such Thing as an Absolutely Correct, Rational, and Complete Analysis.* Quality of analysis can be judged only in the context of time and resources available. Students working on practice problems or cases often complain that they are never given enough time to complete the analysis satisfactorily and that professors have unrealistic goals for what can be accomplished in the time allotted. Students fail to believe that so little time would be devoted to analyzing “such an important policy” in the field. Many of the problems in this book are, however, drawn from field experiences where practicing analysts had little time and limited resources. Only in practice can the twin constraints of time and resources be appreciated. Even if resources and time were unlimited, the analysis would seldom be absolutely correct and complete. There would still be the issues of uncertainty and competing value systems.

The analyst must ask clients about the level of analysis they desire: one person-hour or ten; one person-day or seven; a month or a year of how many people's effort? Analysts must be prepared to examine a problem at any of these levels, making recommendations where appropriate about the optimal amount of effort for each level of inquiry. Time and resources should be spent in amounts that garner the maximum marginal gain in information per dollar spent. Usually two or three levels of analysis can be identified for a policy problem, and an appropriate budget and work program can then be designed for each.

The case of the proposed parking garage (Chapter 10) can illustrate this point. Should the city clear a vacant downtown parcel and build a large municipally owned parking structure? At the first level we may have less than ten hours in which

to analyze the idea. The work program would probably concentrate on verifying the total cost to the city of building and operating the structure and estimating the revenues it might generate by using fee structures and utilization rates from several adjacent lots.

Given more time, say 40 hours, the analysis might be broadened to include an examination of the opportunity costs of building the garage; that is, the benefits lost by not selling the land to a private developer who would build a 20-story tax-generating office building. A sensitivity analysis might also be performed on the garage's proposed pricing schedule and expected utilization rate to see if the decision to build holds under pessimistic scenarios. With a work program that might stretch to six months and include several staff members, it would be possible to inventory the city's private and public parking facilities for pricing practices and utilization rates by location and relate this information to an overall plan for downtown development. Major secondary effects such as the impact on mass-transit ridership and retail shopping could also be explored. If still more time were available, it might also be possible to enter into more detailed negotiations with potential buyers of the downtown site and get written commitments to various types of development. The overall impacts of those proposed developments could then be compared to the parking garage alternatives.

This last level looks very much like what we have described as researched analysis. However, drawing the line between basic and researched analyses is very difficult. Most policy problems can be approached on various levels, given different time and resource constraints, and useful advice can be given to decision makers at all levels of analysis. The analysis can get more comprehensive and detailed as resources and time increase, but even when detailed analysis is done, questions remain. In the parking garage example, these might include the uncertainty over utilization rates and the effect on mass transit and retail activity, as well as uncertainty about possible alternatives to the garage and their impacts on employment and property taxes.

1.4 CHAPTER SUMMARY

This chapter provided an overview of the rationale for using simple methods for analyzing policies and plans. The point was made that decision makers often need answers quickly and will make decisions with available data. Policy analysts and planners can help to improve the quality of decisions by providing quick, accurate, and timely analyses. We described the primary differences among the classic rational problem-solving approach, researched analysis, comprehensive planning, and the policy analysis approach. We also provided a number of practical principles for beginning analysts.

We hope that beginning analysts will grow comfortable with the idea that they can provide clients a product that aids decision making, no matter how limited are time and resources. It is a matter of designing the work program to maximize information and analysis within given constraints. Getting good at this takes time and comes with experience. Practicing on sample problems and case examples is an ideal way to begin.

1.5 ORGANIZATION OF THE BOOK

We believe that, since policy analysis and planning is a craft, an important part of learning is practice. We also believe it is important to experience a continuum of learning from the most abstract and basic to the real and complex. This book is intended to be the first one that a student of policy analysis will use in connection with learning about methods of policy analysis. Previous coursework in statistics and economics is appropriate but not essential. Courses in modeling, survey research methods, linear programming, input-output analysis, econometric methods, and other researched methods will most appropriately follow use of this text. The book itself contains a continuum of learning experiences. Chapter 2 describes the process of policy analysis in some detail and introduces a mini-case exercise that will be referred to throughout the book. Chapter 3 begins a series of seven chapters that describe steps in the policy process and explain associated basic methods that have proven useful in the field. Each of the chapters in this first part of the book ends with exercises.

The second part of the book contains case problems. Unlike the exercises in the previous chapters, little direction is given about which methods should be applied. However, a substantial problem description and clear directives on the needs of the client are provided.

People who read the entire book, practice the exercises, and solve the cases should gain confidence in their ability to approach policy problems, be ready and receptive for advanced courses in researched methods, and be well on their way to a career in a most exciting field.

1.6 GLOSSARY

Basic Analysis or Basic Methods a subset of policy analysis methods, comprising quickly applied but theoretically sound ways to aid in making good policy decisions.

Comprehensive Planning classically, a process in which an extensive inventory phase is followed by alternatives development and the preparation of a plan. The client is usually the general public, and often the preparer's perspective is supposed to be comprehensive, considering all pertinent factors and viewpoints. Most plans have rather long time horizons and attempt to maintain political neutrality.

Policy Analysis a process that usually begins with problem definition rather than the broader inventory phase of the planning process. It also yields alternatives, but the final document is likely to be a memorandum, issue paper, or draft legislation. It has a specific client and a single point of view, a shorter time horizon, and an openly political approach. The final product of such a process is called a *policy analysis*.

Policy Analysis Methods systematic procedures for attacking specific problems with specific purposes. They include *researched methods* and *basic methods*.

Policy Envelope the constraints within which the analysis is to be performed. These may include a problem definition, values for certain parameters, and even a set of alternatives. These constraints can sometimes be altered during analysis if warranted.

Rational Model (or rational problem-solving process) a process for approaching policy problems in which problem definition leads to identification and evaluation of alternatives, which is followed by implementation.

Researched Analysis or Researched Methods a subset of policy analysis methods, requiring substantial budget, time, and data to achieve results. Many researched methods are well codified and are taught in advanced methods courses in planning, policy analysis, sociology, or economics curricula. Examples include survey research, model building, and input-output studies.

1.7 EXERCISES

Exercise 1.

In order to begin to practice quick analysis, make a list of 15 problems that you believe could be resolved using basic methods of policy analysis and planning. Compile this list in 30 minutes or less.

Exercise 2.

You work as the special assistant to the mayor. Clip from one week's worth of newspapers as many articles as possible that address public policy issues. Identify the central decision criterion of each issue.

Exercise 3.

Categorize the problems you identified in Exercise 2 according to those that you believe can be solved through quick analysis and those that require researched analysis. Explain briefly why you categorized each problem as you did.

Exercise 4.

Rank the problems you identified in Exercise 2 according to their political importance to the mayor. Rank them also according to their importance to society. Explain to the mayor why the differences exist and which issues ought to be attacked first.

Exercise 5.

As policy analyst to a U.S. senator, identify ten problems that need to be addressed by federal policy. As sources you might use back issues of national newspapers.

Exercise 6.

Categorize the problems that you identified in Exercise 5 according to those you believe can be solved through quick analysis and those that require researched analysis. Explain briefly why you categorized each problem as you did.

Exercise 7.

Rank the problems you identified in Exercise 5 according to their political importance to the senator. Rank them also according to their importance to society. Explain to the senator why the differences exist and which issues ought to be attacked first.

Exercise 8.

Using the list you developed in either Exercise 2 or 5, think about the types of policy actions that might be taken. Use the typology presented in Table 1.1 to identify the various direct, indirect, monetary, and nonmonetary policies that might be considered for three of the issues.

ENDNOTES

1. For an overview of these problems, see David G. Gil, *Unravelling Social Policy: Theory, Analysis, and Political Action Towards Social Equity*, 4th ed. (Rochester, VT: Schenkman Books, 1990).
2. The origin of these terms is unclear. Robert D. Behn and James W. Vaupel introduce the terms formally in *Quick Analysis for Busy Decision Makers* (New York: Basic Books, 1982), pp. 3–7,

but the phrase “quick and dirty analysis” has been used for years and has long been incorporated into the curricula of schools of public policy and planning.

3. For related discussions, see Rachelle Alterman and Duncan MacRae, Jr., “Planning and Policy Analysis: Converging or Diverging Trends?” *Journal of the American Planning Association* 49, no. 2 (Spring 1983), 200–215; Robert A. Heineman, William T. Bluhm, Steven A. Peterson, and Edward N. Kearny, *The World of the Policy Analyst: Rationality, Values, and Politics* (Chatham, NJ: Chatham House, 1990); David S. Sawicki, “Teaching Policy Analysis in a Graduate Planning Program,” *Journal of Planning Education and Research* 1, no. 2 (Winter 1982), 78–85; and David L. Weimer and Aidan R. Vining, *Policy Analysis: Concepts and Practice* (Englewood Cliffs, NJ: Prentice Hall, 1989).
4. For both pitfalls to watch for and an analytical checklist, see Hugh J. Miser and Edward S. Quade, eds., *Handbook of Systems Analysis: Craft Issues and Procedural Choices* (Chichester, Eng.: Wiley, 1988), pp. 619–56.
5. For more on festival marketplaces, see Bernard Freiden and Lynne Sagalyn, *Downtown Inc.: How America Rebuilds Cities* (Boston: The MIT Press, 1991).
6. Stephen H. Linder and B. Guy Peters, “The Design of Instruments for Public Policy,” in *Policy Theory and Policy Evaluation: Concepts, Knowledge, Causes and Norms*, ed. Stuart S. Nagel (New York: Greenwood Press, 1990), p. 104.
7. Edith Stokey and Richard Zeckhauser, *A Primer for Policy Analysis* (New York: Norton, 1978), pp. 322–23; and Weimer and Vining, *Policy Analysis*, pp. 125, 173.
8. Michael O’Hare, “A Typology of Governmental Action,” *Journal of Policy Analysis and Management* 8, no. 4 (Fall 1989), 670–72.
9. But for an overview of problems with such classifications, see Linder and Peters, “Design of Instruments,” pp. 109–16.
10. O’Hare, “Typology,” p. 671.
11. *Ibid.*, p. 672.
12. Reprinted by permission of Greenwood Publishing Group, Inc., Westport, CT, from Carol H. Weiss, “The Uneasy Partnership Endures: Social Science and Government,” in *Social Scientists, Policy, and the State*, ed. Stephen Brooks and Alain-G. Gagnon (New York: Greenwood Press, Praeger Publishers, 1990), p. 100.
13. Giandomenico Majone, *Evidence, Argument, and Persuasion in the Policy Process* (New Haven: Yale University Press, 1989), p. 21.
14. *Ibid.*, p. 19.