Questions for Self-Evaluation

1. What are five conceptions of equity? Explain what they are and how they differ from each other?

2. What does equality as equity mean? How can equality be operationalized?

3. In what sense is need an objective condition? What effect will basing equity on need have on who benefits from services?

4. What are the differences between demand, preference, and willingness-to-pay?

5. For which aspects of which services are you attracted to using demand as the basis for equity judgments? Preference? Willingness-to-pay?

6. Describe a sequence of thinking and analysis about equity that can help public officials apply the concept to service distribution alternatives.

7. Pick a service and apply to it the questions about who will benefit from using each equity concept, will there be spillover effects, and is it administratively practical.

CHAPTER 3. DECISION RULES AND THE DISTRIBUTION OF URBAN PUBLIC SERVICES

Decision rules are standard operating procedures used by municipal departments to distribute public services. These rules routinize behavior and simplify decision-making. They eliminate the need to consider a variety of alternative solutions each time distributional decisions are made. The recurring issue of how services should be distributed is resolved by employing rules. Decision rules often rely on technical-rational rather than political criteria. Administrators probably do not consciously decide to provide some groups and neighborhoods with better or more services than others. Services are distributed on the basis of criteria that are technical in nature-crime rates and calls for assistance for police services, and attendance levels for special recreation programs.

The consequences of using decision rules may not be understood outside of the department. Rules are applied objectively. They appear to be fair. Decision rules, however, have distributional consequences. They incorporate some notion of equity. This conception of equity often is implicit rather than explicit.

A consequence of decision rules is that they influence who gets how much of what. Therefore, government generalists should be aware of how rules affect the pattern of service distribution. Decision rules are the means by which distributional outcomes are determined. If city managers and mayors, council members, budget directors, and planners want to influence service distribution, they must influence the shaping of decision rules. In this chapter, we provide examples of decision rules for police, libraries, and parks that are used in several large cities. We also discuss the distributional significance of decision rules for these services.

The Function of Decision Rules

Decision rules are important in all organizations. They provide order and simplicity. They enhance communication. They resolve, and avoid, conflicts. They submerge value judgments.

Eight propositions are presented below that describe the functions decision rules perform in organizations.

Propositions

1. Distributional decisions in municipal service departments are made on the basis of organizational decision rules and are little affected by explicit racial and socioeconomic criteria.

2. Distributional decisions are "programmed" decisions in that they are repetitive and routine and "a definite procedure has been worked out for handling them so that they don't have to be treated de novo each time they occur. . ."[2]

3. Decision rules serve as the memory of the organization, transfer past learning and reduce uncertainty. Allison writes that,

> Uncertainty is a critical factor of the environment in which organizations live. Organizations seek to avoid uncertainty. The first rule is: solve pressing problems rather than developing long-run strategies. The requirement that events in the distant future be anticipated is avoided by using decision rules that emphasize short-run feedback.[3]

4. Rules simplify decision-making by eliminating the need to consider a variety of alternative solutions to the performance task. Simon observes that "a matter has become part of the organizational routine when it is settled by reference to accepted or approved practices rather than by consideration of the alternatives on their merits."4 Tradeoffs among goals are neglected. Perrow writes.: "Frequently, there is no clear ground for doing A instead of B; both will have unpleasant outcomes. Rather than agonize over a decision, a rule cuts the knot."5 Rules provide a guide to decision-making when several choices are equally appropriate.

5. Rules are resistant to change. Perrow observes that,

> Rules are like an invisible skin which bundles together all the technological and social aspects of organizations. As such, rules stem from past adjustments and seek to stabilize the present and the future. When things are different in the future, an attempt to change the tough invisible threads means that all kinds of practices, bargains, agreements, and payoffs will tumble out of the web and must be stuffed back in again. As a result of these kinds of interdependencies, changes in organizational rules are generally incremental.[6]

6. Rules make for reliable performance, easy application, and coordinated activity.

7. Organizational rules are influenced by the records maintained by the organization since "the records that are kept determine in large part what aspects of the environment will be observed and what alternatives of action will be considered."[8] However, much information is unreliable and there is more information than can be efficiently processed and analyzed. Therefore, Cyert and March maintain that,

> One of the ways in which the organization adapts to the unreliability of information is by devising procedures for making decisions without attending to apparently relevant information. Thus, the internal biases in the organization increase the pressure (from external uncertainty) to develop decision-methods that do not require reliable information (other than the simplest, most easily checked information).[9]

Consequently, rules tend to be simple.

8. The origin of decision rules can be traced to organizational experience and the impact of extraorganizational norms. The rules are maintained by recruitment, training, and socialization. Perrow observes that one way "of reducing the number of written rules is to 'buy' personnel who have complex rules built into them." These professionals "are trained on the outside, usually at the public expense, and a large number of rules are inculcated into them. They bring these into the organization and are expected to act upon them without reference to their skills."[10]

Implications of Decision Rules for the Distribution of Services

1. Every organizational rule has distributional consequences."

2. Because rules are objectively applied and enforced, they appear to be fair.[12]

3. Because the question: what is the proper basis for determining an equitable fair distribution of service? is subject to many interpretations (equality, need, demand, preference, and willingness-to-pay), decision rules will be particularly significant in those municipal agencies with major responsibility for the distribution of urban public services.

4. Any specific standard of equity (fairness) in service distribution can be criticized, and supported, on a number of grounds. Considerations of equity will not be made explicit in the decision rule selected. In fact, the rule will tend to avoid potential conflict over who should get what by emphasizing technical-rational rather than political criteria. Conventional and quantifiable rather than controversial solutions to the performance task will be incorporated in the rule.[13] Consequently, certain values about who should get what will be systematically excluded. This emphasis upon technical-rational criteria and "objective" solutions is reinforced by recruitment, training, and extraorganizational norms.

5. Because organizational rules tend to be defined in technical terms, the distributional implications are little understood. Consequently, the rule is seldom if ever subjected to challenge on distributional grounds. As Simon observes, policy questions where "technical complexity hides the value issues" are less likely to become political "than matters readily accessible to common sense."[14]

6. Organizational rules are resistant to change. Therefore, the distributional pattern at one point will bear a marked resemblance to the distributional configuration at another.

Specific Examples

00 decision rules determine distributional policy to the extent suggested in the literature? 00 decision rules incorporate conceptions of equity? Ooes their application in municipal service departments have consequences for the equitable distribution of services? The evidence from several cities suggests that decision rules do play a major role in decisions about service distribution and that the use of these rules may have distributional consequences for certain groups in the population. Oecision rules do incorporate conceptions of equity. Sometimes, these implicit conceptions about what is equitable in service distribution operate to the disadvantage of certain 'neighborhoods. Specific examples to illustrate the role of decision rules and the way in which these rules incorporate conceptions of equity will be useful.

Police Oecision Rules

In Boston, Charlotte, N.C., Houston, Richmond, and Rochester, the conceptions of equity employed in police departments to guide service distribution are demand, need, and equality.15 In Rochester, N.Y., for example, patrol officers are assigned to districts on the basis of calls for service (demand) and crime rates (need). However, each district also receives a minimum number of patrol officers. This number exceeds the manpower level some districts would qualify for if crime rates and calls for service alone determined resource allocations. Therefore, need and demand are modified by equality.

In all five cities, each district is assigned a minimum level of patrol manpower based on territory and population. Beyond these minimum standards, manpower assignments are determined by variation in calls for service and variation in crime rates. Reported crime rates, rather than actual crime rates, which can be determined with victimization surveys, are used in distributing patrol personnel. Since victimization rates often differ from reported crime rates, the use of victimization data might produce a substantially different patrol distribution pattern.

In assigning police investigators, decision rules also are used. In Charlotte and Richmond, crime rates are given first priority and the severity of the crime receives second priority in assigning investigators to districts. The severity of the crime is given highest priority in New York City and Rochester. In New York City, crime rates are considered second, and in Rochester, a district's population is considered second. In Rochester, each of the seven police districts in the city receives eight investigators. In Boston, on the other hand, crimes of vice are given top priority, followed by an estimate of the workload, which includes judgment about the amount of time each investigation will take. In Fairfax County, Va., workload is considered first, followed by the severity of the crime and the prospects of making an arrest. Crime rates are considered fourth (see Table 1).

Table 1. Assignment of Investigators by Police Departments

Ranking by police administrators of factors that influence the distribution of police investigators.

	Population	Crime Rates	Severity of the Crime	Arrest Prospects	Balance Arrest Rates	Other
Boston		4	3			(vice, workload) 1, 2
Charlotte		1	2			
Fairfax County		4	2			(workload) 1
New York City		2	1			
Richmond		1	2			.
Rochester	2		1			

Response time is another important variable in evaluating police services. In Boston, Charlotte, Houston, Richmond, and Rochester, response times to calls for service are determined by the nature of the call. Reports of serious incidents receive top priority. Police officials maintain that an effort is made to achieve equal response time among districts. A burglary report from a high income district will not receive a more rapid response than a burglary report from a low-income district. In four of these cities, response time data are neither gathered nor analyzed. Therefore, there is no way to determine whether responsiveness to citizen requests for police assistance is equally distributed among districts in these cities. The exception is Boston, where response time data are maintained by district for different types of calls.

No effort is made in these cities to achieve equal arrest or clearance rates (equality of results) or equal crime rates (equality of impacts) among districts. In some of these cities, data on arrest and clearance rates are not even maintained by district. Crime rate data are maintained by district, and crime rates vary widely, of course, from district to district.

Library Decision Rules

The decision rules most often employed to guide the distribution of library services incorporate demand, need, and equality. Different library departments use different combinations of rules to distribute services. In Oakland, Calif., and Houston, Texas, expenditures, staff personnel, and new acquisitions were distributed to branch libraries on the basis of circulation rates. The higher its circulation, the greater the share of available resources a branch library received. Since residents of middle and upper-income neighborhoods read more, branches located in these neighborhoods received more resources.

The cities of Atlanta, Charlotte, Richmond, and Rochester, employ similar rules to distribute new books and materials to branch libraries. In each city, total circulation (demand) plays a major role in resource distribution. Branch libraries with high circulation totals receive a larger share of available resources. Branches located in poor neighborhoods receive more resources than they would receive if circulation totals alone were used to distribute books and materials. Need as equity (income level) is used to temper demand as equity (circulation totals). In each city, each branch library is provided with a minimum level of services. High circulation branches qualify for additional shares of available resources.

In Boston, Hartford, and Pittsburgh, a different set of decision rules guide the distribution of library services. The library department in Pittsburgh relies upon equality and demand to distribute new books and materials. In Pittsburgh, each branch receives a minimum level of resources. Second, use of services, programs, and facilities is an important factor in allocating resources over and beyond these minimum levels. This decision rule emphasizes frequency of use of all library services rather than book circulation. Consequently, the use rule employed in Pittsburgh differs from the book circulation rules relied upon in Atlanta, Charlotte, Houston, Oakland, Richmond, and Rochester.

A somewhat different rule guides service distribution in Boston and Hartford. Branch libraries are divided into two categories (large and small). Large branches receive more resources than small facilities. Within each category, resources are distributed on an equal basis to branches.

In none of these cities are surveys conducted to determine neighborhood preferences for library services. Public meetings with neighborhood groups are not held to ascertain citizen preferences. Instead, the professional staff in each branch is relied upon to determine and respond to neighborhood preferences for library services. Although branch librarians in each city have considerable control over the choice of books and materials they wish to purchase, this authority is limited. In Pittsburgh, for example, department heads in the central library administration (reference, science/technology, art, music, "popular" materials) decide which books and materials should be purchased for the entire system. Branch librarians are limited to making selections from these purchases.

Cities use a variety of rules to determine the location of new branch libraries. In Rochester, three rules are important. Priority is given to a maximum distance rule. Libraries are located so that a significant number of residents do not live further than an acceptable maximum distance from a branch library. In Rochester, this acceptable distance is two and one-half miles. A second rule used to determine the location of new branches relates the size of existing branches to the density of neighborhoods. Standards are used for the number of square feet of library space needed per 1,000 residents. If a neighborhood is deficient in branch library space based on this density standard, then it is given extra consideration when the location of a new branch is decided. A third factor that affects the location of new branches is the availability of land. Sites that qualify on the basis of the above criteria sometimes are not available.

In Richmond, the location of new branches is determined by the maximum distance, size and density rules. However, the acceptable maximum distance to the nearest library differs on the basis of the race and wealth of the neighborhood. Because low income residents have limited mobility, libraries are located so that residents of poor neighborhoods have to travel a shorter distance to reach the nearest branch library.

In Charlotte, the maximum distance (two and one-half miles), size and density rules are most important in determining library locations. In addition, low income neighborhoods are given extra consideration in locational decisions, since it is felt that greater accessibility will increase use on the part of low-income citizens. Although less important, circulation levels and citizen requests are also considered. Neighborhoods that heavily use available library services and neighborhoods that have been particularly outspoken in seeking additional library service will be given consideration when locational choices are made.

In Hartford, citizen requests are the most important factor in determining the location of new branches. A maximum distance rule is also important. As in Charlotte, Houston, and Richmond, the branch library service areas in Hartford are drawn so that residents of poor neighborhoods have to travel a shorter distance to reach the nearest branch. Therefore, locational decisions in Hartford are affected by three decision rules:

citizen requests and complaints, maximum distance, and the income level of neighborhoods.

Boston employs a single rule to guide locational choices. When funds for the construction of a new branch become available, the facility will be constructed on or near the site of the branch most in need of replacement (based on age/deterioration). In the past, locational decisions in Pittsburgh were based on a maximum distance rule (25,000 citizens within one mile of a branch library). In addition, citizen requests were also considered. The library department believes that the maximum distance rule has now been implemented in all city neighborhoods. There have been no requests for additional branch services in the last seven or eight years. In fact, the Library Board is considering whether to close some existing facilities.

In Atlanta, a maximum distance rule is important. Neighborhoods without a branch library are given consideration in locational decisions. The distance rule is not uniformly applied in all neighborhoods. It is felt that poor neighborhoods will not use library services. Limited resources require, therefore, that consideration also be given to expectations about use in locational choices. These two rules-maximum distance and projected use-are important factors in deciding upon library sites.

In general, a maximum distance rule is most often employed to determine the location of new branch libraries. New branches are located in Atlanta, Charlotte, Hartford, Houston, Richmond, and Rochester so that residents do not live farther than an acceptable maximum distance from a branch library. In Charlotte, Hartford, Houston, and Richmond, the distance rule is not uniformly applied among neighborhoods. Since residents of poor neighborhoods have limited mobility, service areas for libraries located in these neighborhoods are smaller than they are for branches located in wealthier neighborhoods. Therefore, residents of poorer neighborhoods have to travel a shorter distance to reach the nearest branch.

Park Decision Rules

Decision rules for park services tend to be less precise than for some other services. Several rules seem to be balanced in ways that are difficult to specify. The following are decision rules that could be balanced in distributing expenditures for facilities and equipment to existing neighborhood parks:

1. Expenditures for facilities and equipment are distributed in part to meet recreational standards in the community. Suppose that the standard is one basketball court per 500 people. Neighborhood parks that are deficient on the basis of this standard will receive more expenditures than parks that meet minimum standards.

2. Expenditures for facilities and equipment are distributed in part to replace or repair deteriorated items.

3. Expenditures for facilities and equipment are distributed in part based on user rates. Neighborhood parks that are used heavily tend to get extra consideration.

4. Neighborhood parks in low-income neighborhoods tend to receive more expenditures for facilities and equipment, because residents in these areas have a greater need for recreation services.

5. Park size is an important consideration. Large parks receive more expenditures for facilities and equipment than smaller parks.

6. Requests and complaints from residents are considered in distributing funds to neighborhood parks for facilities and equipment.

Each of these rules will have distributional consequences. Rule 1 (recreational standards) incorporates equality as equity. If this rule is followed, each park will have the same number of facilities and amount of equipment per X number of persons. Rules 2, 3, and 4 tend to incorporate demand as equity. Rules 2 (replace or repair deteriorated equipment and facilities) and 3 (user rates) distribute resources on the basis of use of parks. Although replacement or repair of equipment and facilities may be required because of vandalism, heavy use also may require that a disproportionate share of available funds be spent at some parks for these purposes.

Rule 4 (low-income) incorporates need as equity, while rule 5 provides an equal distribution to parks of the same size. If large parks are equally distributed among neighborhoods, some areas are not deprived by allocating resources on the basis of park size. If large parks tend to be located in some types of neighborhoods and not in others, however, resource distribution on the basis of size will result in an unequal distribution of expenditures for facilities and equipment.

The decision rules used by parks departments to distribute expenditures for facilities and equipment to neighborhood parks are ranked in Table 2.

The decision rules most often used to distribute expenditures for facilities and equipment in these communities incorporate demand as equity. In Boston and Fairfax County, Virginia, responding to citizen requests and complaints is the most important rule used to distribute expenditures among neighborhood parks. The citizen input rule is also important in Rochester and Pittsburgh. The deteriorated facilities and equipment rule receives top priority in Charlotte, Pittsburgh, and Rochester. This rule is also ranked third or higher in Atlanta, Boston, Cleveland, and Richmond, while user rates are ranked third or higher in Boston and Hartford.

Hartford and Richmond rely on rules that tend to emphasize equality. In these cities, expenditures are distributed to neighborhood parks in order to meet community standards for facilities and equipment. For example, if the standard is X number of playgrounds or ballfields per X number of residents, parks that are deficient on the basis of this standard receive priority. The recreational standards rule also was ranked second in Charlotte and third in Rochester. In Atlanta, funds were distributed equally to park districts, decentralizing decision-making to that level. In Cleveland, a certain amount of funds were set aside for each park before other factors were considered.

Table 2. Distributing Park Equipment and Facilities

A ranking by park administrators of the factors that influence the distribution of expenditures to existing neighborhood parks for facilities and equipment.

	Deficiencies	Replace	Users	Each	Low Income	Size	Equally	Requests	Other
	1.	2.	3.	4.	5.	6.	7.	8.	9.
Atlanta	4	3	5	6	8	2	1	7	9
Boston		3	2	6	5	4		1	7 (professional judgments)
Charlotte	2	1		3		4			
Cleveland		2	4	1		3	5		6
Fairfax County	5	4				3		1	2 (equal to each legislative district)
Hartford	1	2	3	4	6	8		7	5 (staff assessment)
Pittsburgh	7	1	6	2	5	4		3	
Richmond	1	2		4	5		3	6	
Rochester	3	1	6	4	5			2	7 (availability of outside funding)

Key: 1. Correct deficiencies from standards 2. Replace or repair deteriorated items 3. User rates 4. Some for each park 5. Low income 6. Park size 7. Equally to park districts 8. Requests and complaints 9. Other

None of these cities rely upon need as equity'as the most important consideration in distributional decision-making. Parks in low-income neighborhoods do not receive more expenditures for facilities and equipment. Greater need for recreational services on the part of low-income groups does not determine resource distribution.

Are some neighborhoods less likely than others to complain about and make requests for recreational services?

In five communities- Charlotte, Cleveland, Fairfax, Pittsburgh, and Richmond- parks administrators maintain that low-income individuals are less likely to express their preferences about neighborhood parks. However, administrators in each city also maintain that citizen preferences for recreational services are actively solicited through survey questionnaires and meetings with community groups.

Decision Rules for the Location of New Parks

Several decision rules could be used to influence the location of new parks. Administrators seem to balance a number of these rules, using a number of different combinations.

1. A maximum distance standard is one important factor in determining new park locations. The objective is to have no residences more than some specified distance from the nearest neighborhood park.

2. An acreage and density factor is used to decide the location of new neighborhood parks. A standard of X acres per 1,000 residents is used. Neighborhoods are ranked from most to least deficient in park acreage and the most deficient neighborhood receives first priority.

3. Low-income neighborhoods are given priority because residents of these neighborhoods have a greater need for public recreation.

4. Neighborhoods with high rates of use of existing parks are given extra consideration.

5. Citizen requests are important in determining new neighborhood park locations. If residents have been vocal in seeking a new park, their neighborhood may be given favorable consideration even if the area has sufficient park acreage based on other criteria.

6. Sparsely populated parts of the jurisdiction often are given priority when decisions about park location are made. This occurs because these are often areas of future growth and land suitable for parks can be purchased at more reasonable prices than elsewhere.

7. Geographic balance is important in proposing locations for new neighborhood parks. The council, or board, that must approve development of new parks may prefer that proposed new parks be distributed around the jurisdiction, even to parts of the jurisdiction that are not deficient in park acreage based on other criteria.

8. The decision where to locate a new neighborhood park is often beyond the control of the parks department. Parks often are located on land that has been donated to the city. In other cases, land suitable for a public park is not available in some parts of the jurisdiction.

The use that is made of these rules is summarized in Table 3. The most important rules for locating new parks in the communities studied are the maximum distance, acreage and density, and citizen request rules. Citizen requests are the most important factor in park location in Boston, Fairfax, and Pittsburgh. Maximum distance ranks first in Atlanta, Charlotte, and Rochester, and second in Richmond. The acreage and density rule ranks first in Hartford and Richmond, and second in four other jurisdictions. The citizen request rule is based on demand as equity. The maximum distance and acreage and density rules incorporate equality as equity.

Availability of land suitable for the location of a new park is also a consideration in several cities. The Director of Parks and Recreation in Richmond noted that areas of high density which "need" parks often don't have available space. Parks administrators in Charlotte mentioned that some sites that qualify on the basis of criteria such as maximum distance and acreage and density are not suitable because barriers (freeways, railroad tracks) inhibit access. There is another factor that affects park location. Until 1969, 98 percent of parkland in Charlotte was donated to the city. Availability of donated land is a consideration in decisions about where to locate new parks in six of the nine jurisdictions studied.

Low-income neighborhoods do not receive priority in decisions about where to locate new parks. Need as equity plays no role in the distributional process in five of the nine jurisdictions. In Charlotte the low-income rule ranks third, in Boston and Cleveland it ranks fourth, and in Pittsburgh it ranks fifth.

Decision rules for park location differ from the rules followed to decide upon the location of branch libraries. Several cities also rely on the maximum distance rule to locate library branches. However, in Charlotte, Hartford, Houston, and Richmond, the distance rule is not uniformly applied in all neighborhoods. The service areas for libraries located in low-income neighborhoods are smaller than they are for branches located in wealthier neighborhoods. Low-income citizens have to travel a shorter distance to reach the nearest branch. For parks, the maximum distance rule is uniformly applied among neighborhoods. Low-income residents do not receive extra consideration. Citizen requests play a more important role in decisions about the location of new parks than they do in decisionsabout the location of branch libraries.

Parks is an example of a service whose distribution may be substantially influenced by the historical development of a community. In communities where park land was rarely acquired by any method other than private donations, public policy had little direct influence on park distribution. Deprivations may occur for reasons other than overt public policymaking consequences.

Table 3. Locating New Neighborhood Parks

A ranking by park administrators of the factors that influence neighborhood park location decisions.

	Distance 1.	Density 2.	Income 3.	Use 4.	Requests 5.	Sparsely 6.	Council 7.	Donated 8.	Other 9.
Atlanta	1				2	4	5	3	
Boston			4		1		3	2	
Charlotte	1	2	3		5			6	4
Cleveland			4	3	2	6	1	5	
Fairfax County	4	2			1		5	3	
Hartford	3	1		2	6				4, 5
Pittsburgh	3	2	5	6	1				
Richmond	2	1			3	5			
Rochester	1	2			3		4		5

Key: 1. Maximum distance standard 2. Acreage and density 3. Income 4. Use 5. Requests 6. Sparsely population parts 7. Council prefers balance 8. Land donated 9. Other

Development history may be even more important with some other services. Streets and sidewalks, water and sewer lines, and other aspects of a community's physical infrastructure, are likely to be provided by developers of residential areas and included within the cost of the houses they sell. During the years that this policy has been in effect, neighborhoods developed in that way are likely to have a similar supply of many services. Neighborhoods developed in earlier periods may be deficient in various ways in their physical infrastructure. Policymakers are faced with difficult choices in these instances. Providing these services from general tax sources may be viewed as unfair to residents of neighborhoods where such services were included in the cost of the residences. The absence of adequate services likewise may be viewed as unfair. Similar problems may occur as a result of annexing territory. Development requirements often are different in neighboring jurisdictions. Inequalities often will be inherited in the process of annexation.

Distributional Consequences of Decision Rules

The distributional effects of decision rules can be illustrated by analyzing a series of rules that could be used to distribute police services.

The following rules could be balanced to distribute urban police services.

1. Police patrolmen are partially assigned on the basis of population, so that each district has at least X patrolmen per 1,000 residents.

2. Patrolmen are partially assigned on the basis of total reported crime rates. If a district accounts for 10 percent of the total reported crime in the city, it receives approximately 10 percent of available manpower.

3. Police manpower is partially assigned on the basis of total calls for service. The higher the total number of calls for service in a district or beat, the more manpower it receives.

4. All calls for police service are responded to.

5. Police investigators are partially assigned to districts on the basis of population so that each police district has at least X investigators per 1,000 residents.

6. Police investigators are partially assigned on the basis of total reported crime rates.

Each of these decision rules has distributional consequences. This set of rules incorporates three different conceptions of equity. Rules 1 and 5 (population) emphasize equality as equity, rules 2 and 6 (reported crime) employ need as equity, and rules 3 and 4 (calls for service) rely on demand as equity. If rules 1 and 5 (population) are used to guide the allocation of resources, every district and beat will receive the same number of patrolmen and investigators per 1,000 residents. The variation

in crime rates and calls for service will have little effect on the distribution of police manpower. However, crime rates and requests for service do vary among districts and beats. If equality per capita is used to deploy manpower, high crime areas will receive no more resources than low crime districts. Consequently, patrolmen assigned to high crime areas will have less time to engage in preventive patrol.

Demand as equity also has distributional consequences. Rule 3 requires that manpower be assigned on the basis of total calls for service. Police services are provided to areas that request them. The rule affects who gets what because some areas make more requests for police assistance than others. Although many calls are made to report a crime, some calls for police assistance may have little to do with criminal behavior. Instead, these contacts may deal with requests for information or minor traffic accidents.

Rule 4 (all calls are responded to) also has distributional consequences. If all calls, both routine and priority, are responded to, a significant portion of the patrol officer's time will be required to deal with a variety of relatively minor requests for police assistance. Consequently, priority calls, serious crimes, and the preventive patrol function will receive less attention than they would if non-serious calls were ignored.

Rules 2 and 6 (total reported crime rates) will have consequences for the distribution of manpower that differ from the rules discussed above. Since some districts have more crime than others, these districts will receive more manpower than they would under equality as equity. High crime areas also may not be the same areas that generate a large number of calls for assistance. Therefore, neighborhoods with a high level of total reported crime may receive more manpower under need as equity (total crimes) than they would under demand as equity (total calls).

An alternative set of decision rules could be:

1. Police manpower is partially assigned on the basis of total actual crime rates (victimization rates).

2. Police manpower is partially assigned on the basis of a weighting scheme. The number of serious personal and property crimes are considered more important than the number of total crimes.

3. Assignment of investigators is influenced by the number of actual serious personal and property crimes.

Rules 1, 2, 3 emphasize need as equity as opposed to equality, demand, and need as equity in the first set of rules. The distributional consequences of these rules differ from the effects of the first group of decision rules. Rule 1 assigns police manpower on the basis of total actual crimes determined with a victimization survey in which citizens are asked if they have been crime victims. Districts and beats with a high level of actual crimes are assigned more patrol officers and investigators. In general, reported crime rates seriously underestimate the actual incidence of criminal behavior. In addition, some individuals (the young, in particular) are less likely to report crimes than others.[16]

In 1975, Charlotte, N.C., conducted a victimization survey in order to determine the actual incidence of crime.[17] The survey showed that the actual rate of crime in the city was twice as high as the official rate. Eight of the 10 police areas in the city experienced actual rates of crime from two to four times higher than the official rate.

Rule 2 in the second set of decision rules (manpower is assigned on the basis of the number of serious personal and property offenses) also will have distributional consequences that differ from the other rules discussed. The distribution of total crimes, which includes a variety of minor crimes, may differ from the geographic distribution of serious crimes.[18]

Distributional Consequences of Library Decision Rules

A better understanding can be gained of the possible distributional implications of library decision rules by examining several rules that could be used to distribute library services. Suppose the following rules were employed:

1. Library resources (books, newspapers, periodicals, staff personnel, equipment, facilities) should be distributed among branch libraries on the basis of circulation rates. That is, branch libraries with high use levels receive more resources.

2. In general, the same types of books, materials, programs, facilities, and equipment should be provided in each branch library. The reading preferences of high use branches serve as a guide to the types of books and materials to provide in each library.

3. A maximum distance rule determines the location of new branch libraries. No citizen should have to travel more than X miles in order to reach a public library. This goal determines the location of new branches.

Each of these decision rules will have distributional consequences. Rule 1 tends to penalize branches located in low-income neighborhoods since residents of these areas read less. Rule 2 also works to the disadvantage of poor neighborhoods, since high circulation branches determine the types of books, materials, and programs that will be provided in each library. Since a failure to respond to the reading preferences of low-income citizens may have an impact upon the extent to which these individuals use library services, rule 2 reinforces the distributional consequences of rule 1.

Rule 3 also affects who gets what. Some citizens are less mobile than wealthier individuals. Therefore, the use of an equal distance rule is more likely to present a barrier to accessibility to library services for blacks, young children, the elderly, and the poor than to other people.

Other rules for the distribution of library services are also plausible. These include:

1. Resources should be distributed on an equal basis. That is, the same number of books, materials, programs, and facilities should be provided per 1,000 people.

2. Preferences for library services should be systematically and periodically determined through sample surveys of residents and the types of books, equipment, programs, materials, and activities provided in each branch library should be responsive to the variation in neighborhood preferences.

3. Accessibility to library services should favor low-income neighborhoods because these groups are less mobile, because use drops rapidly with distance, and because patrons of libraries in ghetto areas are often young children.

4. A major advertising and outreach campaign should be conducted in minority and low-income neighborhoods in an effort to stimulate use of library services.

Each of these rules will have consequences that differ from the outcomes of the rules previously discussed. Rule 1 (equality per capita) provides an equal distribution of resources regardless of differences in circulation rates. Rule 2 (surveys of citizen preferences) and rule 4 (advertising and outreach campaigns) may lead to greater use of library services by minorities and the poor. Rule 3 recognizes that low-income groups have limited access to private library and other educational services and facilities and that the public sector has a responsibility to counteract the disparities in resources and opportunities produced by the operation of the private sector.

Conclusion

Decision rules have distributional consequences.15 They affect who gets what. Because decision rules tend to rely on technical-rational criteria (crime rates, calls for service, user levels, professional standards, circulation rates), generalists may not be aware of their operation.

Decision rules incorporate conceptions of equity. Some rely upon equality, others upon need, and still others upon demand. Careful analysis is needed to determine the conception of equity implied in the rule. Geographic analysis is also required to determine the impact that a particular rule or set of rules has upon the distribution of services among neighborhoods.

Some distributional issues can be addressed best by government generalists. Generalists can best determine whether low-income neighborhoods should receive extra consideration in distributional decision-making. Whether user rates or citizen complaints should guide service distribution is a political question and should properly be decided by elected officials and generalist administrators. Distributional analysis on a geographic basis can provide information about the impact that decision rules have on the pattern of service distribution. Analysis is required to determine which rules result in a differential pattern of distribution. This information can be used by generalists to evaluate the decision rules in operation, examine their consequences, and make changes in them.

FOOTNOTES

1. Frank S. Levy, Arnold J. Meltsner, and Aaron Wildavsky, Urban Outcomes, (Berkeley: University of California Press, 1974).

2. Graham T. Allison, Essence of Decision, (Boston: Little, Brown, and Company, 1971), p. 81. Also see Phillip Selznick, Leadership in Administration, (Evanston: Row Peterson, 1957), pp. 29-64, and Herbert Simon, The New Science of Management Decision, (New York: Harper & Row, 1960), pp. 5-6.

3. Allison, op. cit., pp. 76-77.

4. Herbert Simon, Administrative Behavior, (New York: Macmillan & Company, 1961), pp. 88-89.

5. C. Perrow, Complex Organizations, (Glenview: Scott, Foreman, 1972), p. 31.

6. Ibid., p. 29.

7. Allison, op. cit., p. 83.

8. Richard Cyert and James March, A Behavioral Theory of the Firm, (Englewood Cliffs: Prentice-Hall, 1963), p. 106.

9. Ibid., p. 110.

10. Perrow, op. cit., p. 27.

11. Simon, op. cit., 1961, p. 178.

12. Levy, et al., op. cit.

13. W.J. Murin, Mass Transit Policy Planning, (Lexington, Mass.: D.C. Heath, 1971), p. 97.

14. Herbert Simon, "Changing Theory and Practice of Public Administration," in J.A. Uvenges, Jr., ed., The Dimensions of Public Administration, (Boston: Holbrook, 1975), p. 44.

15. With the exception of Oakland, information on the decision rules used in various cities to distribute police, parks, and library services was gathered by the authors. Data on library decision rules in Oakland were obtained from Levy, et al, op. cit.

16. Blacks are not less likely to report crime than whites. Nationally, blacks report 45 percent of all their experiences with personal crimes while whites report 44 percent. However, young people are considerably less likely to report crime than older citizens. Youths between the ages of 12-19 reported only 31.5 percent of the personal crimes committed against them in 1973. See Wesley G. Skogan, "Citizen Reporting of Crime: Some National Panel Data," 13 Criminology, (February, 1976), 535-49.

17. An Evaluation of Selected Aspects of Police Services (City of Charlotte, North Carolina: Budget and Evaluation Department, 1976).

18. Kenneth R. Mladenka and Kim Quaile Hill, "A Reexamination of the Etiology of Urban Crime," 13 Criminology (February, 1976), 491-506.

19. For a discussion of the role of decision rules in distributional decision-making, see Robert L. Lineberry, Equality and Urban Policy- (Beverly Hills: Sage, 1977); levy, et al, op. cit.; Kenneth R. Mladenka, "Organizational Rules, Service Equality, and Distributional Decisions in Urban Politics," Social Science Quarterly (Forthcoming); and Kenneth R. Mladenka and Kim Quaile Hill, "The Distribution of Urban Police Services," Journal of Politics (Forthcoming).