

COMPREHENSIVE STATE PLANNING AS A FRAMEWORK FOR  
WATER RESOURCE DEVELOPMENT

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State planning in New Mexico has a relatively long history as an activity of state government. A State Planning Board was originally created by the legislature in 1935. It existed in one form or another until 1949, when it was replaced by an Economic Development Commission in which state planning as a meaningful process was absent. The third major legislative action in this field occurred in 1959 when the Economic Development Commission was incorporated into a newly created Department of Development, along with the Tourist Bureau and New Mexico Magazine. At the same time the State Planning Office was created as a staff agency to the governor.

For the past eight years the State Planning Office has retained the functions that it was given in 1959, except for certain changes enacted in 1961. Among other powers and duties, the Planning Office in 1959 was directed to "provide for comprehensive studies of the water resources of the state" and to "work toward the preparation of a comprehensive statewide water resource development plan relating water resource development potential and needs to population, industry, agricultural and recreational growth and development, and indicating benefits to be derived from such water development. ..." (1)

Within two years, however, the legislature decided to broaden the mandate of the Planning Office, and directed it to "work toward the preparation of comprehensive statewide resource development plans relating development potential and the needs of various resources to population, industry, agricultural and recreational growth and development, and indicating benefits to be derived from water development ... ." This fit in with the legislature's basic mandate to the Planning Office, which was given the assignment of planning "for the long range comprehensive balanced development of the state's natural, economic and human resources and public facilities." (2) By broadening areas of responsibility, the legislature acted "to correct an imbalance in the 1959 Act because of the concentration on water resources compared with other natural resources." (3)

In order to accomplish this task, a major function of the Planning Office since 1962 has been the development of a Statewide Resources Development Plan. Its first phase was conceived as an inventory of the various resources of the state and resulted in the publication of some 40 studies. These were prepared by state agencies, private consultants, and various economic experts under

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the Office's supervision. Many topics of resource availability, development, and related problems were analyzed, including state water resources, water law, and agricultural land and water.

These studies have provided the framework for the current second phase of the state's Development Plan, of which three aspects are relevant to the subject of this conference. They involve new techniques for New Mexico, which, hopefully, will enable the state to anticipate more accurately and react more effectively to the multitude of problems and opportunities which are developing today and which will emerge in the future.

A major effort is the formulation of a Statement of Goals and Objectives to serve as the governor's policy statement guiding the state's overall comprehensive development. Every state should have some clear idea of what it wishes for the future and how this best should be achieved. Otherwise, it will be forced to react to events as they occur rather than be able to anticipate developments. For example, because of inadequate recognition of social and economic trends, many of the nation's largest cities are facing serious crises which are almost impossible to overcome. Effective planning might well have been able to modify or prevent many of the problems that they now face.

Similarly, in New Mexico, the rapid growth of Albuquerque has created many difficulties both within the city and also in adjacent areas. The city's internal problems include its limited economic base, some air pollution, and its declining central business district. Most of these areas of concern were perceived, but solutions have proven difficult to achieve. Although these subjects are primarily relevant to the city itself, other questions involving the region and even the state have arisen from Albuquerque's growing importance. For example, effective planning may help preserve the quality of many recreational areas in Sandoval and Tarrant counties which are being utilized more intensively as Albuquerque's population increases. Similarly, such communities as Placitas, Corrales, Belen and Los Lunas are closely intertwined with Albuquerque. If their development is to be maximized qualitatively as well as economically, meaningful regional and state planning may well be required.

In comparison with many other states, New Mexico's problems seem less intractable. The rapid economic development of Colorado and Arizona provides a glimpse of what the future of New Mexico may be. For example, New Mexico's neighbors have experienced growing concentration of population within a single metropolitan area. Thus, the Denver standard metropolitan statistical area in 1965 had 55 percent of Colorado's population. Similarly, Phoenix's proportion of Arizona's total was 52 percent and Salt Lake City's was 53 percent of Utah's total. In comparison, the Albuquerque SMSA had 29 percent of New Mexico's total population in 1965. Thus one may reasonably expect that

Albuquerque's population growth will be more rapid than that of the state as a whole. This concentration of people within a limited area has meant the rural areas have lost both residents and economic influence. In addition, metropolitan area problems have become more apparent, and effective remedies more difficult.

New Mexico's effectiveness in shaping its future as it wishes will naturally depend on wise use of the powers which state government can reasonably command. For the state as a whole, and particularly for state government, it is necessary to formulate clearly articulated targets and appropriate programs for their implementation. For the state as a whole, this is the essence of policy planning.

The Planning Office is proceeding on the assumption that New Mexicans are concerned with moving ahead in each of four broad areas: economic development, personal and cultural development, natural resources development and conservation, and state and local governmental efficiency and effectiveness of operation. Thus, the crucial problems, needs and opportunities in each of these four areas of state governmental concern must be identified and state policy set forth with clarity. Only then will the various state agencies be able to work in concert with one another towards common goals.

At the first level these goals are relatively broad and general. However, they must contain enough substance to provide guidance to resolve many policy issues facing New Mexico. This should be based primarily upon identifying the basic needs and problems to be confronted. For example a broad goal in the area of economic development certainly would involve the attainment of satisfactory levels of income, employment, and production for the state's citizens and its business firms. A fundamental policy issue in this area is the proper rate of economic growth which the state desires and can achieve. Implicitly or explicitly, the state's commitment to rapid economic growth as a primary goal will be determined or modified after this and other subjective factors are analyzed and when specific objective criteria are explicitly articulated. For example, it may be desirable to set specific targets for unemployment rates or personal income in conjunction with an expected rate of population growth and its distribution. In some cases, various regional standards, possibly related to such areas as northern New Mexico, may be necessary.

In all cases, criteria for performance would relate to specific policy issues. They would be measures of intent and eventually of performance. In this manner the effectiveness of alternative policies could be anticipated and eventually compared on the basis of actual results. For example, economic growth could be assessed in terms of targets for per capita personal income

or total value of production by major industrial groups within the state. Once such criteria are formulated, the probably effectiveness of alternative policies in achieving these goals could be compared. In addition, actual performance by agencies could be measured against standards which had been accepted and understood in advance.

In the area of human resources, a broad goal might well be articulated with respect to education. It might favor the provision of an outstanding public educational system from elementary to university levels. Additional goals with respect to specific topics such as higher education, vocational education and elementary and secondary schools might also be included. These should be related, first, to economic development in terms of changes in the population's capabilities for earning a better level of income. They also should be related to goals relating to the strengthening of New Mexico's three sub-cultures and any intended assimilation between them. These goals would indicate the importance attached by the state to the educational process and expected results in human, cultural and economic terms. Thus, a broad framework of reference with respect to education could be established.

These goals should also deal with basic policy issues which confront the state with respect to the educational process. The purposes to be served by the state's public educational system need to be spelled out far more clearly than has been done before. The importance of training in the use of particular skills must be analyzed in conjunction with examination of characteristics and trends in the state's labor force and its utilization. This will help determine the role of vocational education in the state as well as the location of specific facilities.

Questions relating to higher education would certainly include possible concentration of certain graduate programs on specific campuses as well as the possible incorporation of all campuses into a single university system. The advantages and drawbacks of these approaches could be analyzed in part from the experience of other states, particularly within the Rocky Mountain area.

The educational system could also more effectively assist in the development of the state's natural resources. Exploitation of a larger proportion of its mineral wealth might be facilitated by expanded geological and related studies by the Institute of Mining and Technology.

With respect to water, the broad approach of comprehensive development planning seems particularly appropriate. The essentially stable supply of water in New Mexico will increasingly have to be apportioned among competing demands. Currently, water use is determined by which economic interest is willing to pay the highest price in a given situation. Thus mining interests have acquired water rights formerly used for agriculture and have transferred

them to their own purposes. As the demand for water grows, a new system of allocation may be required. Its form should at least be influenced by statements of goals, which will indicate the priorities which the state attaches to various alternative courses of development.

Following the enunciation of broad goals concerning these and other policy issues, specific objectives will be determined. For example, the creation of a number of vocational education institutions might be indicated. In terms of academic standards, specific targets for the proportion of high school graduates who pass specific achievement tests might be an appropriate objective.

In addition to broad statements of goals on general topics and clearly articulated objectives on specific subjects, another major task is the necessity to provide direction to the programs of state agencies in terms of goals and objectives. Such agencies should be apprised about results that are expected within a stated time period. The advantages of such an approach are obvious. Continuity of programs will be more likely even if personnel concerned with implementation are not always the same. The budgeting process will also be facilitated when requested programs can be measured against anticipated goals and eventually evaluated in terms of specific standards. The reorganization of state government can also be provided with a rationale in terms of basic functional categories which will relate to overall goals and objectives.

Thus, statements of goals and objectives can be useful on many levels. They will enunciate the state's concerns along with its approaches to the basic policy issues which are fundamental to them. In addition, narrowly-defined objectives will determine appropriate procedures for immediate action. Placing these tasks within a broad framework will also clarify interrelationships which might otherwise be obscured. Finally, the programs of state agencies will then be directed toward the accomplishment of specific objectives in the short run and broadly stated in the long run. Their efforts thus will be more rationally interrelated, which will hopefully promote greater efficiency and effective action. This will be facilitated by the preparation of plans for the major functional areas of state concern (such as education, transportation, recreation and health, to name several). Each functional area plan will identify means for achieving the relevant policy goals over a five or ten year period, or even longer. Presently, the Planning Office has prepared a Statewide Comprehensive Outdoor Recreation Plan and is in the process of preparing comprehensive plans for vocational rehabilitation, mental retardation, health, and the preservation of historic sites. Such planning involves a close working relationship with the relevant operating state agencies and private groups.

In addition to the formulation of statements of goals and objectives, a second major effort of the Planning Office involves state capital improvements programming. Although the state's capital expenditures are extensive, a recent report prepared by the Office concludes that "there is no long range comprehensive program of state capital improvements," (4) either for the state as a whole or for major functional areas. The State Planning Office is preparing a five to six year State Capital Improvements Program to be completed by January 1969. The Program will be updated annually and extended one year ahead.

This effort by the Planning Office ties in closely with the determination by the state of its basic objectives for the future. These objectives will be the basic determinants in setting up priorities for capital expenditures by the state for such expenditures constitute the state's investment program to promote economic, social, and natural development or conservation. With respect to the rest of the spending programs of state agencies, a possible method by which they can be brought into conformity with overall state objectives is a rapidly developing technique called program performance budgeting or the planning-programming-budgeting system (PPBS). This technique was first developed by the federal government in the Defense Department and relates expenditures to needs and specified levels of performance, rather than with traditional agency alignments. Plans and programs are meant to be interrelated and to be subsumed under overall objectives that have been determined for the state as a whole.

A fundamental aspect of both capital improvements programming and program budgeting is the necessity for a comprehensive statement of broad goals and operational objectives. They provide a framework by which priorities can be determined and performance may be impartially evaluated. Thus by fitting a proposed capital expenditure by the state into the overall development plan, its real significance may be revealed. Similarly, the PPBS system requires functional area planning and specific performance criteria, both of which are requisite aspects of the state's comprehensive development planning process.

A third major activity of the Planning Office related to state comprehensive development involves the division of the state into districts for planning and development purposes. New Mexico, with the fifth largest total area of all the states in the nation, is in many ways a conglomerate of disparate parts, many of which have little in common with each other. Cultural patterns and major economic activities vary widely throughout the state and present opportunities and problems which in many cases are unique to particular regions. The creation of these districts could stimulate joint activity in areas larger than individual cities or counties, but smaller than the state as a whole.

The Planning Office's districting scheme has divided the state into six such regions. Each district may establish a regional planning commission, as permitted by Chapter 239 of the New Mexico Statutes. This commission should consist of representatives of county, city and other local governmental bodies, and serve as the sponsor for all regional planning and development programs, including health, recreation, transportation and pollution control. It should serve as a review body for local plans and projects so that district-wide planning can proceed in conformity with state and regional viewpoints and through a harmonious blending of urban and rural interests.

The State Planning Office programs which have been described can be viewed most usefully as part of a planning process. Both in the short run and the long run problems sometimes arise either suddenly or gradually, often the inevitable result of the successful resolution of previous problems. The Planning Office is attempting to make state government better able to recognize and cope with problems, rather than to avoid or ignore them. The broad overview provided by a clearly articulated Statement of Goals and Objectives - both on a comprehensive and specific level - should provide a needed and useful perspective which has been lacking in the past. Capital improvements programming and program budgeting should help assure that state agencies act in consonance with these objectives. Finally, the creation of planning and development districts may provide a more effective instrument for dealing with regional problems than has heretofore existed and also help assure that regional and state goals are at least compatible if not actually identical.

In addition to the study and possible creation of new planning and administrative mechanisms, the Planning Office has been studying the present condition and probable prospects for the state as a whole, as well as its various components. Such policy planning requires reliable and accurate information. Although available data is incomplete and often inconsistent, certain patterns have become apparent and they are by no means encouraging.

One of the most prominent indicators of economic health is the rate of growth of population in a region. During the 1950's, New Mexico's average annual population increase was almost twice that of the United States as a whole. However, in the past seven years, New Mexico's population growth on an annual basis has been less than one-half as rapid as that of the nation. In fact, in the last three years New Mexico's population has remained almost completely stagnant, and one recently published report actually indicates a decline in population for the state between 1966 and 1967. (5) Similar trends with respect to income and employment are apparent. For example, in 1967, total employment in the state seems to have remained at the same level as in 1966, but most major components actually experienced decreases in employment. Agriculture, mining, construction, manufacturing and finance all seem to have fewer wage workers in 1967 than in 1966. The only major categories reporting increases

were trade, services and state and local government.

In the 1950's, New Mexico's economic boom seems to have been created, primarily, by the federal government and by certain mining activities, such as oil, gas and uranium. However, between 1960 and 1966, federal employment (both civilian and military) decreased by 1,600 or about three percent, and mining employment decreased by 4,200 or 20 percent. Thus the major sources of growth for the state in the 1950's have not contributed very much overall in the 1960's.

It is imperative that the state gain some perspective regarding strengths and weaknesses within its economy in order to improve the situation. If the state commits itself as far as possible to rising income and employment for its citizens, it must attempt to determine the best way to achieve these objectives. Additionally, human and environmental factors must always be kept in mind when decisions affecting the economy are made.

In terms of water resources development in the near future, the direction taken by the state's economy will be fundamental. For example, many of New Mexico's rivers and creeks can be used for such recreational purposes as fishing, or for certain manufacturing concerns which may to some extent pollute these streams and make them far less satisfactory for recreational purposes. In another area, measures may be taken to increase the state's effective water supply by means of phreatophyte control or irrigation ditch lining. Although such programs may in the short run benefit agriculture they might have an adverse effect on tourist activities if a by-product were the elimination of many cottonwoods in scenic areas of the state. Such seeming dilemmas can more easily be resolved if they are put in the context of an overall plan for state development in which the roles of the major economic activities have been at least anticipated if not specifically determined.

Some of the planning tools and methods being developed by the State Planning Office have previously been described in this paper. It may be useful to indicate how their implementation may be of use in solving problems related to water resources development in New Mexico.

The formulation of a broad policy statement of goals and objectives, for example, can be expected to clarify the importance the state attaches to various possible uses of water. In addition to such traditional consumptive purposes as mining and agriculture, the needs of cities and recreational activities are growing rapidly, as well as the viewpoints of conservationists. Broad indications of state goals can be significant tools for those who either administer or desire the use of water in the state. In addition, the enunciation of more specific objectives should help determine acceptable standards for water quality and depletion. The related subject of functional area planning can also be expected to illuminate relationships between seemingly dissimilar



categories. In particular, the full social benefits and costs of water projects could be more closely approximated. Moderate range planning over a five to fifteen year period could be also facilitated. Another gain would be derived from the better organization of information about the state which would be required in setting up goals and objectives.

Improvements in the performance of state government should also promote more effective water development policies. Both capital and current expenditures by the state may benefit from such techniques as capital improvements programming and program budgeting. Agencies would be aware of broad guidelines with respect to state policy and could administer their programs accordingly. A meaningful state investment plan could promote more efficient action by the state. Since program budgeting requires at least medium-range forecasts, state agencies would also be forced to plan ahead to anticipate expected requirements. Because water is an integral component of many activities in which state agencies are involved, the possible improvements in planning, coordination and administration could produce numerous benefits. As for longer-range planning, any eventual shortages in the state's water supply would be more likely to be anticipated and prevented.

The creation of planning and development districts should also yield benefits with respect to water development policies. As problems are increasingly resolved cooperatively on an area-wide basis, conflicts between rural and urban interests over water utilization may become less intense. On the interstate level, existing arrangements may also be improved through such planning-oriented groups as the Four Corners Regional Development Commission and the Federation of Rocky Mountain States, Inc.

Finally, the State Planning Office may be able to suggest improvements in regulatory activities of the state. Such areas as building and housing codes, land use zoning controls, air and water pollution standards, and taxing and licensing policies may require modifications to assure the implementation of programs implicit in statements of goals and objectives.

In addition to such planning for the immediate future, the Planning Office is also concerned with long-range trends within the state and the nation. For example, in one of the most provocative Phase I studies, Professor R. P. Lutz attempted to anticipate the effects of scientific development and technological change in the state's economy. He notes that "the state has reached a critical point in regard to the use of its available water supply," and predicts that the proportion of total consumptive use of water accounted for by agriculture will decrease in the foreseeable future. This study finds both research and development and mining to be the most promising for the state as a whole, although somewhat slower growth in agriculture and manufacturing is anticipated. (6)

In another report prepared for the Phase I Inventory, Professors H. R. Stucky and Donald C. Henderson conclude that declines in total farm employment may not only be inevitable, but may actually be desirable and necessary if agriculture is to remain viable in the state. They note that in north central New Mexico "the scientific developments and technological changes have not been as widely applied, and many rural people remain in a chronically low income position." (7) The probable structure of agricultural production and employment must be anticipated as clearly as possible if New Mexico is to share in even the present proportion in the nation's overall total.

Another study which bears on long-range analysis provides population projections for New Mexico to the year 2000. (8) Estimates of employment in basic economic activities were made and required levels of population were derived from these estimates. This analysis, along with many other studies in the Phase I aspect of the Development Plan, provide the framework, both statistical and general, for viewing New Mexico's future prospects and challenges.

When it seems clear what is likely to occur within the state as a result of fundamental technological and social forces, the state can then decide whether the future that is likely is also desirable. Within the limitations of public action and discretion, expected eventualities can be modified or possibly even obviated. In this way, the future can indeed be anticipated with some reasonable confidence that man can be the master of his destiny. Without planning, our society will be at the mercy of a rapidly accelerating revolution in science and technology and our lives will be determined by unseeing forces rather than intelligent foresight. The process of planning, at the least, provides a method for coping with and molding an environment that must and should change with the passage of time.

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