

# A PROPOSED REGIONAL DEVELOPMENT PROGRAMMING SYSTEM FOR THE LANSING TRI-COUNTY REGION

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# ABSTRACT

# A REGIONAL DEVELOPMENT PROGRAMMING SYSTEM FOR THE LANSING TRI-COUNTY REGION

# By Harold Peter Marshall

Regional planning in this country has been handicapped by its advisory function within a fragmented institutional framework. There has been a growing awareness that the traditional approaches to regional planning are unable to overcome these handicaps. These approaches place too much emphasis on the technical concern of plan-making and not enough emphasis on implementing these plans through action policies and programs. Consequently regional planning will have to develop a more action-oriented approach in order to generate an effective planning process.

In response to the need to make planning more actionoriented, this thesis attempts to assess the possibility of
integrating a programming system into the regional planning
process. Regional development programming, as proposed, is
a systematic approach to problem-solving and the selection
of alternative courses of action through time. In other
areas of planning a programming system of this general nature has been used successfully to generate action-oriented
planning.

The programming needs of regional planning were con-

commission. Currently its planning program is very researchoriented; yet once its regional comprehensive plan is completed, the Commission will be refining its plan into
action-policies and programs. It was concluded that a programming system could potentially help the Commission formulate realistic plans and proposals, develop a rational decisionmaking process, coordinate its activities and actions, and
maximize the allocation of a limited supply of resources.

An evaluation of the underlying concepts of existing programming systems was considered to provide a conceptual basis for a regional programming system. The programming system utilized by the community renewal program and the Department of Defense (commonly referred to as program budgeting) and a proposed programming system for city planning were considered. It was determined that many of the concepts and techniques utilized by these programming systems could be both applicable and beneficial for regional planning purposes.

Procedural guidelines for integrating a programming system into the regional planning process was presented in the final chapter along with a discussion of some of the potentials and limitations of this proposed system. With an emphasis placed on a "shortened-time-horizon", and developing a strategy of "programmed action" this system attempts to make regional planning more action-oriented. It is con-

cluded that the local governmental units within the region must participate directly in the development of this strategy if the programming system is to be effective. Hopefully this programming system will help fill the gap between the operating decisions of government and long-range planning considerations.

# A PROPOSED REGIONAL DEVELOPMENT PROGRAMMING SYSTEM FOR THE LANSING TRI-COUNTY

REGION

Ву

Harold Peter Marshall

# A THESIS

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#### CHAPTER T

#### PLANNING FOR THE METROPOLITAN REGION

"Metropolitan planners in this country are laboring under formidable odds. They have been given a dictaphone, a calculator and a fist full of prisma color pencils and have been directed to sally forth and slay the giant of urban discorder. Unlike the original David — who had something quite tangible with which he rendered his Goliath 'hors de combat' — the contemporary metropolitan planner must be content to throw ideas, suggestions and proposals."

C. David Loeks

The metropolitan region denotes an area that is characterized by the functional integration of a central city with its suburbs and rural hinterland. Its designation as a planning unit developed from an awareness that city planning cannot achieve all of its objectives without considering its larger regional framework; and that regional planning, as originally conceived, cannot achieve its ends of resource development and sustained economic progress without taking into account the existence of urban centers.

A survey conducted in 1963 showed that 126 of the 142 Stardard Metropolitan Statistical Areas had some type of planning

<sup>1</sup> C. David Loeks, "Taming the Urban Giant," <u>National Civic</u> <u>Review</u>, (July 1962), p. 354.

<sup>2 &</sup>quot;Regional planning in the United States has at various times referred to different types of activities as well as different types of areas. There was a time, roughly from 1933 until the end of World War II, when regional planning meant primarily the development of water resources and adjacent land resources within a given river basin." John Friedmann and William Alonso, Regional Development and Planning, (Cambridge, M.I.T. Press, 1964), p. 498.

<sup>3</sup>Ibid., p. 504.

activity on an area-wide basis. In most cases this took the form of a metropolitan or regional planning agency which was established by joint action of local units of government under state enabling legislation.

# The Advisory Nature of Regional Planning

An inherent difficulty in regional planning has been its inability to resolve the political conflicts arising out of the diversity, balkanization, and fragmentation of governments within the metropolitan region. Through the years there has been a considerable amount of talk but very little action toward the creation of metropolitan-wide multi-purpose units of government to handle problems which are area-wide in nature. Conse-

<sup>4</sup> Housing and Home Finance Agency, <u>National Survey of Metropolitan Planning</u>. (Washington: U.S. Government Printing Office, 1963), p. 14.

<sup>5</sup> Within the context of planning for a "metropolitan-region", the type of planning agency involved could appropriately be designated as a metropolitan or regional planning agency. Most people think of the metropolitan area as a place where a community of persons living in an urban environment are tied together by economic and social bonds, but served by a miltiplicity of local governments. Yet a Standard Metropolitan Statistical Area, as defined by the Bureau of the Census, consists of one or more counties with a central city or cities having a population of 50,000 or more. The Tri-County Regional Planning Agency, which is used as a case study for this thesis, could have appropriately been labeled as a Metropolitan Planning Agency since the counties involved make up a Standard Metropolitan Statistical Area. Yet a large percentage of the total land area involved is more rural than urban in character.

<sup>6</sup> Stuart Eurman, <u>Is Regional Planning Needed in a Metropolitan</u>
Area and <u>Can It Be Effective?</u> (Denver: Inter-County Regional Planning Commission, unpublished, 1959), pp. 1 - 2.

quently, such techniques as service contracts, special districts, city-county consolidation, and annexation have been resorted to for more positive but partial solutions.

In most states the basic authority for municipalities to engage in planning is provided through state enabling legislation.

"In general, agencies created under these laws betrayed two serious weaknesses inherent in the enabling laws themselves: 1) Powers are advisory only; fulfillment of plans is dependent upon the voluntary cooperation of governing bodies of numerous local units; and 2) no metropolitan-wide legislative body exists to enact planning implementation ordinances."7 In all but seven states the legislation is permissive rather than mandatory, reflecting the attitude that the acceptance of regional planning should be based on the voluntary acquiesence of the local units.

The success of a regional planning agency, in other words, depends primarily upon its ability to persuade and convince the numerous and autonomous governmental units within the region.

For the leaders of each community in a regional area to sit down across a table and admit that they have common problems is an achievement in itself; yet their agreement on a common course of

<sup>7</sup> International City Manager's Association, Local Planning Administration, (Chicago: The International City Manager's Association, 1959), p. 28.

<sup>8</sup> Housing and Home Finance Agency, <u>Planning Laws - A Comparative Digest of State Statutes for Community, County, Region, and State Planning Through December 1957</u>, (Washington, D.C., 1958), p. 16.

action "seems like an almost insurmountable task in most cases."9

The underlying factors behind this situation were described by

Bollens and Schmandt in their book, The Metropolis:

"People find it much easier to act when they are confronted with a self-evident problem or when a decision is forced on them by the pressures by circumstance. At the same time they are less likely to commit themselves to community plans that may involve present self-sacrifices on their part in return for some projected future benefit. Planning, for this reason, requires the strong support of politicians to articulate community needs and goals and rally public support. It is precisely in this respect that metropolitan planning is seriously handicapped. Since the governmental or institutional pattern in most urban complexes is not conducive to the emergence of political leaders who consider the general good of the whole area as their primary responsibility, the task of guiding metropolitan growth is relegated to numerous locally-based officials with locally-oriented allegiances."10

This raises the philosophical question concerning the role of regional planning. Ideally the end product of a regional planning process would be regional solutions to regional problems based on a regional decision-making process. Some planners maintain that these conditions cannot be established without a complete restructuring of governments in the region into a single entity. It is generally recognized, however, that formal metropolitan government in any appreciable degree is not likely in the

<sup>9</sup> Eurman, op. cit., p. 2.

<sup>10</sup> John C. Bollens and Henry J. Schmandt, The Metropolis, (New York, Harper and Row, 1965), p. 305.

<sup>11</sup> See, for example, Harold F. Wise, "Current Development of Regional Planning in the United States," <u>Planning 1965</u>, (Chicago: American Society of Planning Officials, 1965), p. 48.

United States because of the individualistic attitudes of both communities and citizens. Even with a change in attitudes, a formal reorganization of government would require a tremendous effort and expenditure of years before the necessary legislation could be enacted.

Many observers feel that the recent development of Metropolitan or Regional Councils represents a significant step toward Metropolitan Government. These Councils consist of representatives from the local governmental units within a given metropolitan or regional area, who meet regularly for the discussion of common problems, the exchange of information, and the development of agreement on policy questions of mutual interest. In 1963 there were only a dozen metropolitan areas which used these Councils, and in all cases their role was purely advisory in nature. 12

Consequently, there is a general agreement that regional planning, for the immediate future anyway, will be limited to its purely advisory role. There is a difference of opinion, however, concerning its potential effectiveness. Harold Wise claims that because of its advisory nature regional planning "has seemed to be a kind of fun exercise, done by nice people, for the advice of other people who don't particularly want to take anybody's advice." In this context regional planning

<sup>12</sup> Roscoe C. Martin, <u>Metropolis in Transition</u>, (Washington, D. C., Housing and Home Finance Agency, 1963), p. 143.

<sup>13</sup> Wise, op. cit., p. 57.

is an end in itself, yet "it should be considered as a means to the end of regional decision-making." While most writers on this subject are perhaps not as outspoken as Wise, they all tend to agree that the regional planning process must be given some operational significance if it is to be effective. In other words there must be a functional linkage between plan-making and plan effectuation.

This provides the setting for an issue which is central to both regional planners and regional planning commissions:

Can regional planning be effective with only advisory powers?

Roscoe Martin considered this issue in a case study of the

Twin-City Metropolitan Planning Commission. In Martin's words:

"The planning process to the first of 1963 has yielded a number of highly professional reports which have met with almost uniformly favorable response in the region. Beyond these reports, what has M.P.C. (Twin City Metropolitan Planning Commission) to show for its five years labors? This is not a rhetorical question but one being asked frequently in the area, even on occasion by friends of metropolitan planning. Some spokesmen for the area have said impatiently that they want, as they put it, action rather than advice on metropolitan problems.

"The controversy surrounding this measure points up a basic dilemma confronting the metropolitan planning commission. Should it limit its activities to research, publication and advice, or should it seek to implement its findings and recommendations through political action? Should it confine itself to the traditional role of a planning agency, or should it

<sup>14</sup> Wise, op. cit., p. 57.

embrace a more activist philosophy?"15

In effect, regional planning is experiencing the same shift in emphasis today which city planning experienced twenty years ago. Prior to World War II city planning was primarily a technical problem of plan-producing. Gradually the planning emphasis shifted from a technical concern of making the plan to an action program which would exercise rational control over the development of the physical environment. Since World War II there has been more emphasis placed upon plan implementation through the tools of zoning, subdivision regulations, urban renewal, and capital improvements programming. The emphasis of regional planning today is just beginning to shift from a technical to an action orientation. The importance of this trend was illustrated by Walter Johnson when he stated that:

"Local planning has probably gained favor in this country because it has become action-oriented, certainly

By way of postscript, it should be noted "that as of early 1965 the (Twin City) Metropolitan Commission endorsed twenty-nine specific proposals as the 1965 session of the Minnesota legislature convened. The most controversial of these was to establish a public mass-transic agency with the power to tax, float bonds, exercise eminent domain, acquire land and equipment, and develop a mass-transic system for the metropolitan area." Alan A. Altshuler, The City Planning Process, (Ithaca, New York, Cornell University Press, 1965), p. 378.

<sup>16</sup> Norman Williams, "Planning Law and Democratic Living," Law and Contemporary Problems, Duke University Law School, Vol. 20 No. 2, (Spring 1955), p. 310.

not because what has been accomplished is theoretically sound. It seems likely that regional planning will also need to become action-oriented if it is to be meaningful to the electorate of a democratically constituted society."17

An awareness of the need to make planning more actionorientated has generated a considerable amount of discussion in
recent urban planning literature. While many of these discussions
tend to be highly theoretical in nature, perhaps the substance
of their proposals will provide the framework for a more actionoriented planning process. 18

## The Search for a New Approach

Martin Meyerson stated that the first step to an actionoriented planning process is to "build a bridge" between the
operating decisions of government and the long-range comprehensive
plan. Long-range planning alone, according to Meyerson, has the
following major deficiencies:

- 1) An inability to translate long range goals and objectives into meaningful and operative action statements for decision-making;
- 2) An inability to provide current and meaningful informa-

<sup>17</sup> Walter K. Johnson, "Comment on Regional Planning as a Field of Study," <u>Journal of the American Institute of Planners</u>, Vol. 29 No. 3, (1963), p.177.

<sup>18</sup> Keith M. Honey, <u>Comprehensive Policy Plans for the Lansing Tri-County Region</u>; <u>A New Dimension in the Planning Process</u>," Unpublished thesis, School of Urban Planning and Landscape Architecture, (East Lansing, Michigan, 1964), p. 30.

tion to support rational and coherent action.

- 3) An inability to induce the kind of forward planning at the operating level of government that would lead to eventual accomplishment of previously adopted long-range policies and goals;
- 4) An inability to evaluate the intended and unintended consequences of previously implemented actions.19

Consequently Meyerson proposed "a short run development plan (five to ten years) as that compromise between immediate problems and long range expectations." Implicit in Meyerson's concept is the necessity for relating plans to the flow of time and for progressive refinement of the more distant-horizon proposals so they may be introduced into the decision-making process at the proper time and in the proper context. Since the resources available to carry out these proposals are limited, it is necessary to develop a programming technique which will maximize the allocation of those resources which are available. 22

<sup>19</sup> Martin Meyerson, "Building the Middle Range Bridge for Comprehensive Planning," <u>Journal of the American Institute of Planners</u>, Vol. 22, (Spring, 1956), p. 62.

<sup>20 &</sup>lt;u>Ibid.</u>, p. 62.

<sup>21</sup> F. Stuart Chapin, "Taking Stock of Techniques for Shaping Urban Growth," <u>Journal of the American Institute of Planners</u>, Vol. 29 No. 2, (1963), p. 79.

<sup>22</sup> Meyerson, op. cit., p. 62.

Meyerson's basic concept of programmed action has become an integral part of the federal community renewal program (CRP). A CRP is a method for determining a community's overall need for urban renewal, and for developing a staged program of action to meet these needs. The basic elements of a CRP are:

- 1) Identification of blighted, deteriorated and deteriorating areas in the community;
- 2) Measurement of the nature and degree of blight and blighting factors within such areas;
- 3) Determination of financial, relocation, and other resources needed and available to renewal areas.
- 4) Identification of potential project areas and the type of renewal action contemplated within such areas:
- 5) Programming of urban renewal activities.23

In a recent article Ira Robinson called the CRP "a tremendous conceptual and procedural contribution to the planning art." Underlying the CRP approach is the need to make planning procedures and methods more compatible with the emerging theories of rational decision-making and problem

<sup>23</sup> S. Leigh Curry, "The Community Renewal Program," Federal Bar Journal, Vol. 21 No. 3, (Summer, 1961), p. 360.

<sup>24</sup> Ira Robinson, "Beyond the Middle-Range Planning Bridge," <u>Journal of the American Institute of Planners</u>, Vol. 31 No. 4, (1965), p. 308.

solving. Robinson states that the CRP has added the following elements to the planning process: "1) The need to define alternative courses of action; 2) the examination and testing of these alternatives; and 3) the explicit ranking and weighing of the consequences against the pre-established goals."25

In his article Robinson stated that the "next logical step" is for planners to draw upon the CRP concept, and extend its ideas in scope, context, and function into a community development programming system. As proposed, such a system would be concerned with the continuing identification of the major city problems, with on-going data collection and prediction, and with continuing analysis, programming, and revision of planning policies and programs.<sup>26</sup> Like the CRP, community development programming is concerned with shortened time-horizons and with a central focus upon programmed action.

While there are some significant differences between city and regional planning, perhaps the underlying concepts behind community development programming can be expanded into a regional development programming system. This thesis will consider the possibility of establishing such a system.

Quite obviously there would be some major limitations involved if the establishment of a programming system were

<sup>25 &</sup>lt;u>Tbid.</u>, p. 310.

<sup>26 &</sup>lt;u>Ibid</u>., p. 304.

considered purely on a conceptual basis. Consequently, it was decided that a case study approach would be more appropriate.

The Tri-County Regional Planning Commission, in Lansing, Michigan, has been functioning for the past ten years. Its staff is in the process of preparing a major land use, natural resource and transportation study which sould be completed by May 1967.

Currently the planning program is very research oriented; yet once the comprehensive plan is completed the Commission will be refining it into action policies and programs. The second chapter of this thesis will consider whether a programming system could be used to help design more realistic planning programs. For the purposes of evaluation the discussion will be limited primarily to the process involved in refining water resource proposals. Alternative long-range water use plans for the Tri-County Region were completed a few years ago so the Planning Commission has had time to at least give some preliminary thought toward implementing these plans. Hopefully this evaluation will help define the programming needs of regional planning.

This conceptual basis for integrating a programming system into the regional planning process will be considered in the third chapter. Hopefully an evaluation of the underlying concepts of the community renewal program and community developmental programming, as proposed, will provide a basis for structuring a regional development programming system.

Johnson noted that specific programming techniques and methods

have not been adequately developed in the fields of city or regional planning. 27 In other areas of planning, however, the science of programming has been developed quite extensively. One of the most noted examples is the Department of Defense's programming system, known as program budgeting. 28 Some of the specific programming techniques used in program budgeting will be discussed in the third chapter in the context of their potential use in regional planning.

The fourth and final chapter will relate the specific programming doncepts and techniques with regional planning in general and the Tri-County Water Use Plans more specifically. The final pages of this thesis will be devoted to analyzing the potentials and problems involved in integrating a regional development programming system into the regional planning process.

<sup>27</sup> Johnson, op. cit., p. 177.

<sup>28</sup> The science of programming has also been developed quite extensively in planning for "underdeveloped" areas; business and industrial planning; and planning in some of the European countries.

## CHAPTER II

# A CASE STUDY: TRI-COUNTY REGIONAL PLANNING COMMISSION

of planning which requires a region-wide approach. Wise policy making on the part of individual government units is almost impossible in the absence of broad water resource surveys and some concept of regional requirements and potential. Unfortunately water resource management has had a long history of uncoordinated, piecemeal decision-making and development. "Recreational facilities, dams, storage reservoirs, water systems, sewerage plants, roads and bridges, and so forth have been constructed, aimed at providing for a single need." This situation has generated a number of complex problems involving excessive public costs, ineffective use of scarce water resources and detrimental land and water use conflicts.

An awareness of these problems and the necessity of solving them on an area-wide basis was one of the major reasons why the Tri-County Regional Planning Commission sponsored the Battelle water study. 3 The purpose of this chapter is to identify the

<sup>1</sup> Tri-County Regional Planning Commission, An Investment
Program in Regional Resource Analysis, (Lansing, Mich., 1959), p. 4.

<sup>2</sup> Sanford S. Farness, <u>The Problem of Coordination in Watershed Management</u>, October Water Conference, Mich. Natural Resource Council, (Lansing, Mich., October 22, 1958), p. 4.

Bettelle Memorial Institute, <u>Alternative Long Range</u>
Water Use Plans for the Tri-County Region, Michigan, Tri-County Regional Planning Commission, (1963).

processes involved in refining the general long-range conclusions and recommendations of the Battelle study into operational policies and programs. With this end in mind the chapter was divided into the following sequential phases:

- 1) A factual description of the events leading up to the Battelle study, the study itself, and its major recommendations and conclusions.
- 2) An evaluation of past and proposed activities of the Commission as they relate to the implementation of Battelle's recommendations.
- 3) An evaluation of the potential use of a programming system to help implement Battelle's recommendations, with particular emphasis placed on defining the programming needs of regional planning.

While the context of this case study is limited in scope, its conclusions could have far-reaching implications toward the entire regional planning process. If regional planners are going to actively strive to integrate their planning proposals into the decision-making process, they must equip themselves with up-to-date tools of urban and regional analysis to facilitate a rational decision-making and problem-solving process.

## A Factual Examination

The Tri-County Region is composed of Clinton, Eaton, and Ingham Counties, having a combined rural and urban population of 298,949 in 1960. The Region is defined by the U.S. Bureau of the Census as being a Standard Metropolitan Statistical Area with Lansing as the central city. It encompasses 1,700 square miles which includes a total of seventy-eight local governmental units; forty-eight townships; seventeen villages; ten cities; and the three counties. 4

By resolution of the Board of Supervisors of the three counties, the Tri-County Regional Planning Commission was established in July 1956.<sup>5</sup> The Commission was established under Michigan State Enabling legislation for regional planning which permits two or more local governmental units to create an agency for the purposes of planning for their physical, social, and economic development.<sup>6</sup>

Late in 1957, an executive director was hired, and soon after the Commission created its first work program. This program established the need for adequate base maps, basic

<sup>4</sup> Tri-County Regional Planning Commission; <u>Information</u> Report #1, (Lansing, Michigan, 1963), p. 1.

<sup>&</sup>lt;sup>5</sup> Ibid., p. 1.

<sup>6</sup> Act 281, Michigan Public Act of 1945, as amended.

<sup>7</sup> Tri-County Regional Planning Commission, <u>Preliminary</u> Outline, <u>Long Range Planning Program</u>, (Lansing, Michigan, March, 1958).

research studies, and long-range comprehensive plans for the region. Included in this program was the Commission's first reference to the implementation of these regional plans. Proposed were "Recommendations for Implementation Plans," which included:

"required coordinative and administrative procedures, governmental policies, zoning, health, building and subdivision regulations, official map, urban renewal and other procedures available to local governments."8

Based upon this program the Commission requested and was granted federal funds under Section 701 of the 1959 Housing Act as amended.  $^9$ 

During the summer of 1959, the Commission held a series of meetings with various representatives from the three counties to review the problems and needs of the region. 10 One of the

<sup>8</sup> Ibid., p. 5.

<sup>9 &</sup>quot;The commission's first federal grant for \$13,830.00 was approved by the Housing and Home Finance Agency in March 1959. These funds permitted the completion of an economic base analysis, a base map program, and land use and physical geography studies. A second federal grant for \$34,750.00 was approved in June, 1959. This grant was for the purpose of preparing a community pattern study and inventory surveys on public utilities, transportation, land use, and recreation." Keith M. Honey, Comprehensive Policy Plans for the Lansing Tri-County Region: A New Dimension in the Planning Process, unpublished thesis, (School of Urban Planning and Landscape Architecture, Michigan State University, 1964), p. 77.

<sup>10 &</sup>lt;u>Ibid</u>., p. 77.

results of these meetings was the establishment of a policy by the Commission that they would "try to unite the area in working on common problems (by working out) suggested answers to the problems...and providing advisory recommendations to local units."11 In response to this policy the Commission published a report which reviewed the nature of area-wide problems and their resulting impact upon the economic and social framework of the region. 12

Despite the early problem-orientation of the Commission, they recognized "the necessity to complete the basic factual studies of the Region before engaging in an extensive advisory service program."13

"It is hoped that the Tri-County Regional Planning Commission can provide region-wide studies and foster working together on a coordinated basis on problems which will be common to all governmental units." 14

Due to a skeleton staff and budget the activities of the Commission between 1959 and 1961 were restricted; however, they did sponsor an economic base analysis and carry out both a base mapping program and a number of inventory surveys including

<sup>11</sup> T.C.R.P.C. Minutes, December 2, 1959.

<sup>12</sup> Tri-County Regional Planning Commission, The Functional Organization of the Lansing Tri-County Region: Needs and Problems, (Lansing, Michigan, 1959).

<sup>13</sup> Honey, op. cit., p. 78.

<sup>14</sup> T.C.R.P.C. Minutes, December 2, 1959, op. cit., p. 78.

public utilities, transportation, community facilities, etc.

In 1960 the Commission first approached various consultants

concerning a water study, and the contract was awarded to the

Battelle Memorial Institute in 1961.

Background of the Battelle Study Previous case studies have illustrated that the decision to establish a metropolitan or regional planning agency can usually be traced to a particular problem or group of problems which have reached a level of urgency or crisis. 15 Although undocumented, it is a fairly obvious assumption that some of the area-wide water problems were underlying factors behind the establishment of the Tri-County Regional Planning Commission. Less than a year before the Commission was created, the Michigan Water Resource Commission felt it was necessary to sponsor a Lansing area conference on water problems that were area-wide in nature. 16 Evidently, some of the problems had reached "a level of urgency" during the previous summer months when the flow of the Red Cedar and Grand Rivers were especially low. The following problems were among those identified at the conference:

-Rapidly growing Meridian Township was without a sewage

<sup>15</sup> Martin, op. cit., p. 130.

<sup>16</sup> Water Resource Commission, Lansing Area Conference with the Water Resource Commission, (Lansing, Unpublished report, 1955). Thirty state, local and university officials participated.

collection and treatment system.

-The location of the East Lansing Treatment Plant was an offensive nuisance to part of the Michigan State University campus.

-During the previous summer it was necessary to pass a considerable protion of the Grand River through a Lansing power plant. The resultant increase in temperature and decrease of oxygen level (along with other factors) led to a "fish kill" up stream in the Grand Ledge area.

The need for an area-wide solution of these problems was exemplified by the supervisor of Grand Ledge when he said,"When the areas above us in the river neglect their problems we're the ones that suffer." A spokesman for the Water Resource Commission summed up the conference by stating that:

"It has always been a policy of the Commission that if the local government units can work the problem out among themselves without the Commission having to put them over a barrel...things work out much more satisfactorily all around." 18

The need for a surface and ground water study was established in the original work program of the Tri-County

<sup>17</sup> Ibid., p. 41.

<sup>18</sup> Ibid., p. 42.

Regional Planning Commission. (March 1958). 19 During the following summer a number of water experts spoke before the Commission on the specific water problems in the region and potential courses of action. 20 Based on the findings of these meetings the executive director of the Commission prepared a staff report on the surface water problems and programs in the Greater Lansing Area. 21 It was stated in this report that the water resources of the area were far more limited in their physical availability than the expected needs. Cited in the report was the following statement made by an official of the Michigan Water Resource Commission:

"With Complete treatment of sewage at Lansing and East Lansing, little, if any, further water resources are available to serve future populations or industrial water use expansion if river frontage below Lansing running down through Grand Ledge, for example, is to remain habitable."22

<sup>19</sup> The study as programmed included "surface and ground water supply, water sheds, drains, lakes, pollution, floods, flow characteristics, identification of problems and future requirements," Tri-County Regional Planning Commission, op. cit., p. 2.

<sup>20</sup>Prof. Clifford R. Humphrys (Department of Resource Development, Michigan State University) June 26; Milton Adams (Executive Secretary, Michigan Water Resource Commission) July 24; Kenneth McManus (Technician, Clinton County Soil Conservation Service) July 24; Norman Billings (Chief, Hydrology Division, Michigan Water Resource Commission) December 3, 1958.

<sup>21</sup> Sanford S. Farness, "Some Comments on Present Sewage Disposal and River Use Problems and Programs in the Greater Lansing Area," Staff Report of the Tri-County Regional Planning Commission (April 1960).

<sup>22</sup> Michigan Water Resource Commission, "Michigan Water Resource Problems," Official Report to the Governor's Office, January 1959).

It was noted that important decisions concerning the development of a sewage treatment plant were pending; yet locally-oriented sewage studies were unable to fully consider stream capacities, community water needs, limited water right factors, and full community costs and benefits.<sup>23</sup> This report concluded that:

"It is apparent that if the Greater Lansing Area is to utilize its limited water resources economically, efficiently and lawfully, broader and more realistic studies of future development factors will be required. The sewage disposal problem needs to be analyzed in relation to long term metropolitan area needs, riverfront land use, and area coordination of local sewerage facilities. A study program of this nature will provide a needed coordinating framework - a long range, general sewage disposal and river use plan - so that existing and future facilities will result in workable systems meeting the legal test of proper use of public waters and utilizing scarce water resources in the most beneficial and economic manner."24

Based on recommendations of this report, the Planning
Commission decided to sponsor, and the local governmental units
agreed to support, a Long-Range Sewerage Disposal and River Use
Study. In October of 1960 the Commission made preliminary contact
with various consultants throughout the country. In a letter to
each of them the Commission outlined the following "expectations
as to the desirable character and contribution of the proposed
study:

<sup>23</sup> Farness, op. cit., p. 1.

<sup>24</sup> Ibid., p. 2.

- "1. The focus of the study will be to identify and evaluate feasible designs for future river use, waste disposal and related urban patterns for the Lansing Metropolitan Area within the framework of Upper Grand Basin Water resource potentials. It is anticipated that one solution will be chosen, via public evaluation, and become a basic reference for future land use, urbanization, water management, public investment, and local public utilities design. Recreation, waste disposal, public and private amenity uses, and power production (cooling water) are the main competing and expanding stream uses at present.
- "2. Possible solutions or designs should be reduced to two or three of the most feasible. Each alternate should be fully evaluated in terms of resultant costs and benefits as a reference for public decision-making and future investment. The study contractor may also recommend a one 'best' solution from his point of view.
- "3. If necessary, the limiting factor of water resources should influence patterns of future urbanization. This may require designing future urban loads upon the stream systems in some dispersed settlement pattern fitting uses to resource capabilities.
- "4. Maintenance of future water quality and environmental amenities should be given appropriate emphasis. Water quality standards, water law and future sewage treatment technology should also be explored for their relevance to proposed solutions.
- "5. The evaluation of alternative water resource supplies and uses may also come into question. Lansing has an expanding municipal power system utilizing local limited stream resources while power generated at Great Lakes sites can be imported."25

After thoroughly considering all of the submitted proposals, the Commission contracted with the Battelle Memorial Institute to conduct the study.

<sup>25</sup> Letter from Sanford Farness, executive director of the Tri-County Regional Planning Commission to Karl Klaussen of Arthur D. Little Inc., October 5, 1960.

The Battelle Study Battelle started their study in August of 1961. It was a ten month study costing an estimated \$50,000.26 The basic methodology used in their study included a review of the past and present water supply, water demand, and economic conditions of the region. After identifying and selecting between alternative economic development goals they then proceeded to project future water demands for the year 2000.27

The next step involved translating the over-all water requirements into specific alternative water plans. "It was recognized that the plans for water and sewage treatment could be different, depending on the physical pattern of growth in the Region." The three alternative patterns were planned sprawl, satellite cities, and corridor. The final step of the study included an evaluation of these alternative plans.

Working in an advisory capacity for Battelle were about

100 lay and technical people who were organized in a group called

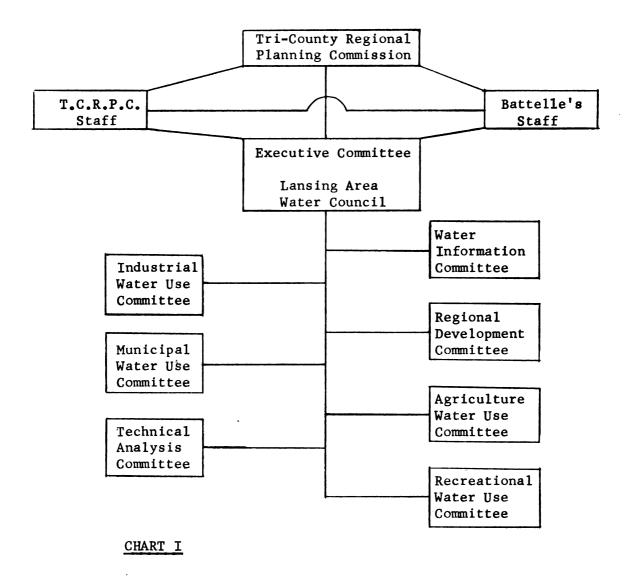
<sup>26</sup> Lansing State Journal, "Research Scientists Start Study of Area Water Resources," (Lansing, Michigan, August 3, 1961), p. unknown.

<sup>27</sup> Battelle Memorial Institute, op. cit., p. 13.

<sup>28 &</sup>lt;u>Ibid</u>., p. 13.

<sup>29</sup> Planned sprawl is where most of the growth would be concentrated in the ten townships or Greater Lansing Area. "Other patterns might be visualized wherein the major growth of population would take place in the satellite communities surrounding Lansing (Satellite Cities), or along the corridors representing present major transportation routes (Corridor)." Ibid., p. 13.

the Lansing Area Water Advisory Council. The Council was under the direction of a seven member executive committee which had seven other committees reporting to it. Each of these committees had its own area of concern and responsibility. The general relationships that each of these groups had with each other are diagrammed below:



<sup>30</sup> V. W. Langworthy, <u>The Water Utility---Its Part in Regional Planning</u>, (A paper delivered at the Eastern Water Company Conference, Atlantic City, N.J., October 25, 1962), p. 7.

Summary of Battelle's Conclusions and Recommendations Most of the water problems of the Region can be causally related to the extreme fluctuation in the flow of the rivers and streams. The Grand River at Lansing, for example, fluctuates between an average monthly low flow of 190 cubic feet per second to an average monthly high of 2,237 cubic feet per second.

The rivers and streams of the Region are used quite extensively for the dilution and assimilation of wastes. Pollution is not a critical problem, however, except during the periods of low river flow. 32 Consequently, Battelle concluded that some man-made reservoirs should be built to store water until it is needed for low-flow augmentation. If these reservoirs were built "the quality of the water of the Grant and Red Cedar Rivers could be improved and maintained at high levels to the year 2000."33 Consequently the study recommended that engineering plans and cost estimates should be prepared for a number of alternative impoundment sites, yet the amount of money invested in these sites should be "traded off" with investments for sewerage treatment facilities. 34

It was also recommended that a flood plain analysis should be completed to provide a framework for a flood-control-action

<sup>31</sup> Tri-County Regional Planning Commission, Physical Development Factors, (Lansing, Michigan, March 1961).

<sup>32</sup> Battelle, op. cit., p. 96.

<sup>33 &</sup>lt;u>Ibid</u>., p. 9.

<sup>34 &</sup>lt;u>Ibid.</u>, p. 11.

program.<sup>35</sup> By necessity the activities of this program would be limited to the construction of levees, diversion channels, or channel excavation, and flood plain zoning.<sup>36</sup> The cost would prohibit the construction of impoundments specifically for flood control,<sup>37</sup> and the use of low-flow augmentation impoundments would offer only limited flood protection.<sup>38</sup>

The study noted that water-oriented recreational facilities in the Region were very deficient; yet it also noted that "relatively little additional water for recration can be expected."39 "As one studies the Tri-County Region, it becomes apparent that the optimum use of the streams in the Region is for the processing of wastes, and therefore should not be allocated for recreation."40 The report did propose, however, tentative recreational impoundments on the Lookingglass and Maple Rivers.41

Although a specific growth pattern should not be determined entirely on water considerations, the study noted that the costs for developing water, sewerage, and other water-related facilities would vary considerably according to the physical

<sup>35</sup> Ibid., p. 11.

<sup>36</sup> Ibid., p. 98.

<sup>37</sup> Ibid., p. 10.

<sup>38</sup> Ibid., p. 102.

<sup>39</sup> Ibid., p. 160.

<sup>40</sup> Ibid., p. 9.

<sup>41</sup> Ibid., p. 9.

growth pattern of the Region.42 The specific use of surface water for municipal water supply could not be determined until after a ground-water survey was undertaken; however it did state that the "water resources of the Region are sufficient to encourage healthy economic growth, regardless of the geographic pattern of growth."43

It also concluded that the management of water resources and the handling of waste-disposal problems - by their nature - will require complete cooperation among the individual governmental units. The "establishment of a Metropolitan or Regional Water Authority may be required (and should be considered) to implement the plans for water and water-related facilities. 44

# Evaluation of the Past and Proposed Activities of the Planning Commission in Implementing Battelle's Recommendations

The results of the Battelle study were presented to the public in February 1964. Soon after the release of this report, the Planning Commission announced that it had already contracted the U. S. Geological Survey in regards to a proposed ground water survey - one of the leading recommendations of the Battelle study. They discovered, however, that the other recommendations

<sup>42 &</sup>lt;u>Ibid</u>., p. 9.

<sup>43</sup> Ibid., p. 9.

<sup>44 &</sup>lt;u>Ibid</u>., p. 9.

<sup>45</sup> T.C.R.P.C. Minutes, February 13, 1964.

of the study needed considerable retinement before they could be acted upon. Consequently they requested "that the staff make a study to determine potential ways of implementing recommendations of the Battelle study. This study, expected to be drafted by the end of the summer, was to emphasize ways to plan, construct, and operate the water use facilities required to meet the needs of the growing population of the region."46

As might have been expected, the Commission took very little action on the Battelle study during the tollowing months, pending the results of the staff's study. Although undocumented, sometime during these months the Commission established an unwritten policy that they were not going to refine Battelle's recommendations into operational policies and programs at that time. This was substantiated by one of the Commission members,47 who stated that they were purposely limiting their activities to the development of a Regional Comprehensive Plan, and in most cases specific planning policies and proposals will not be drafted until after this plan is completed.48 This policy was based on the principle that planning should be comprehensive in nature.

<sup>46</sup> T.C.R.P.C. Minutes, April 13, 1964.

<sup>47</sup> From an interview with M. Boylan, July 11, 1966.

<sup>48</sup> For example, one of the major recommendations was the establishment of a metropolitan or Regional Water Authority. The study, however, didn't elaborate on the specific details involved. At various times the Commission talked about the possibility of investigating the organization and legal framework necessary to create such an Authority, yet it was never carried out. (See T.C.R. P.C. Minutes April 23, 1964).

In other words, a planning proposal should be based on a plan
"that recognizes and defines its relationship with all significant
factors, physical and non-physical, local and regional."49

Consequently, the staff study on implementing Battelle's recommendations was never carried out and the activities of the Commission to date have been very sporadic and relatively insignificant in regards to implementing Battelle's recommendations. For all practical purposes the only major recommendation to be implemented through the efforts of the Commission was the sponsorship of the ground water survey.

In effect this represents a complete reversal of the Commission's earlier problem-orientation to its present research-orientation. Quite obviously it is necessary to emphasize research during the early phases of a planning program; yet there are other factors which also should be considered.

Stuart Eurman claims that a "regional planning agency needs to demonstrate its ability to take action during the early phases of their program in order to maintain public support."50 Perhaps this explains why many of the local governmental units were reluctant to financially support the ground-water survey.51

<sup>49</sup> T. J. Kent, <u>The Urban General Plan</u>, (San Francisco, Chandler Publisher, 1964), p. 91.

<sup>50</sup> Eurman, op. cit., p. 3.

<sup>51</sup> In a feature article for a local newspaper, the executive director stated "that the ground water study instituted by the Commission is already under way through the federal Geological Survey Unit, but that the majority of water systems in the area

Most citizens and politicians alike would tend to evaluate the Battelle study in terms of its tangible rather than long range benefits.

This raises a second question concerning the feasibility of taking action on any of Battelle's recommendations without a "comprehensive framework." In reference to the creation of a Metropolitan Water Authority it might have been not only feasible but also desirable to have taken immediate action.

Two of the major conclusions of Roscoe Martin's case study on local adaptation to changing urban needs were: 1) Metropolitan action normally results from an established need; and 2) Adaptive action normally will be taken only after an extended period of incubation, including frequently a history of prior attempts and failures. 52

Both of these factors have direct relevance to the recommendations proposing a Metropolitan Water Authority. A recognized need for such an Authority was at its peak directly after the study was completed. 53 The Lansing Area Water Council,

<sup>51 (</sup>continued) have not responded to request to help finance the program.

<sup>&</sup>quot;Lansing, East Lansing, Williamston, Stockbridge, and Mason have agreed to pay their share; Charlotte has refused; and the others have made no committments."

Lansing State Journal, (Lansing, Michigan, July 23, 1965), p. unknown.

<sup>52</sup> Martin, op. cit., p. 130.

<sup>53</sup> Headlines of the <u>Ingham County News</u>, February 19, 1964
"Tri-County Planners Start to Work on Water Study," and in the <u>Lansing State Journal</u>, February 12, 1964, "Tri-County Water Resources Will Get Commission Action."

which participated in the Battelle study, was made up of over 100 citizens who were both interested in and familiar with the water problems of the area. This Council could have been retained as a study group to investigate the legal and administrative framework necessary to create such an authority. Moreover even if the Commission had taken immediate action the Authority would probably not have started functioning much before the Commission completed its Comprehensive Plan.

While the Commission could and perhaps should have acted upon these recommendations, this involves a philosophical issue which is not directly within the context of this thesis. fact remains however that the Commission is currently very research-oriented; yet within a few years it will have to become very action-oriented in order to implement its plans and proposals. Two of the major recommendations of the Battelle study were to consider the possibility of establishing a Metropolitan Water Authority to manage the region's water resources, and to construct man-made reservoirs for low-flow augmentation and recreational purposes. Technically competent plans will not be enough to assure the success of these proposals. There are too many political, financial, and legal problems involved in these and similar proposals, which can only be resolved through a concerted effort on the Commission's behalf. If the Commission does not put forth this effort, then its entire planning program will prove to be little more than an academic exercise.

aware of its responsibilities toward implementing its plans and programs. In the <u>Study Design</u> of the Land Use - Natural Resource - and Transportation Study, it was noted that the finalized Comprehensive Development Plan for the year 2000 will "provide the basic guidelines for developing more detailed short-range plans."54

This report also noted that a Financial - Legal Capabilities

Study will be carried out to "test the feasibility of proposed

programs and to indicate the financial and legal tools which may

be available for carrying out these programs."55

In the specific context of Battelle's recommendations the Commission will consider the formation of a regional water and/or park authority to serve as the focal point in planning for the financing, construction, and maintenance of future water and recreational resource development. 56

The Commission tentatively plans on taking action on the low-flow augmentation program, utilizing the impoundment sites identified by Battelle.<sup>57</sup> It will also tentatively promote,

<sup>54</sup> Tri-County Regional Planning Commission, Study Design: Land Use - Natural Resource - Transportation Study, (Lansing, Michigan), p. 18.

<sup>55 &</sup>lt;u>Ibid.</u>, p. 40.

<sup>56</sup> Tri-County Regional Planning Commission, Natural Resource Problem Study, (Lansing, Michigan), p. 103.

<sup>57 &</sup>lt;u>Ibid.</u>, p. 66.

through the Regional Advisory Council, 58 planning legislation which will provide acceptable methods to be used by the public in land preservation or acquisition for future resource development. 59

The above is only a representative sample of the types of action which the Commission plans to undertake on Battelle's recommendations. The most significant thing it illustrates is the Commission's determination to follow through on its plans and proposals rather than limiting itself to a "research, advise, and publication" role. This provides the setting for the central issue of this chapter: Could a programming system be used to help refine Battelle's long-range water-use plans into specific action policies and programs?

## The Potential Use of a Programming System

Programming involves the process of selecting between alternative policies and programs over time. Since every planning operation is forced to make this type of decision, it is evident that programming is an integral part of the planning process. Conceptually a programming system involves the following sequential phases: 1) an identification of a

<sup>58</sup> Tri-County Regional Planning Commission, Study Design, op. cit., p. 10.

<sup>59</sup> Tri-County Regional Planning Commission, Staff Report, #2, op. cit., p. 10.

problem, 2) a determination of the resources needed and available to solve this problem, 3) an identification of potential courses of action, and 4) the programming of these actions through time.

The mere complexity of a regional planning operation tends to indicate the need for a regional programming system. The multitude of decisions and activities involved in the implementation of the water plans alone seems overwhelming; yet this is only one of the many elements in Tri-County's Planning Program. Before a regional programming system can be designed, however, it is necessary to first determine the specific requirements of such a system. David Grossman stated that a programming system could serve three separate but related functions as 1) a research tool, 2) a guide for decision-making, and 3) a guide for action. 60 Potentially Tri-County could use a programming system to serve all three of these functions.

The mere fact that local response to Battelle's recommendations has not been forthcoming illustrates that long-range plans, by themselves, are unable to generate an area-wide approach to area-wide problems. In turn, this also illustrates the need to refine these long-range plans into meaningful and operative action-policies and programs. With this end in mind, the Planning Commission has indicated that the following steps will be under-

<sup>60</sup> David Grossman, "The Community Renewal Program," <u>Journal</u> of the <u>American Institute of Planners</u>, Vol 29, # 4, p. 268.

#### taken:

- 1) Long-range plans will be used primarily as basic guidelines for more detailed short-range plans.
- 2) A policy planning program will be used as a vehicle to integrate these short-range plans into the local decision-making process.
- 3) Technical and citizens' advisory committees will be extensively used to help develop "realistic goals and reasonable policies."61

and advisory committees can effectively and productively integrate regional planning proposals into the local decision-making process. However there are some measures which the Commission can take to increase the likelihood of success. In the first place its emphasis will have to shift from a concern of comprehensive planning to a concern of problem-solving (based on the Comprehensive Plan). It was noted earlier that initially local support of both regional planning in general, and the Battelle water study more specifically, could be traced to a public awareness of some of the near-critical problems facing the Region. An area-wide solution to some of these problems will need to be

<sup>61</sup> Tri-County Regional Planning Commission, Staff Report  $\underline{\#\ 2},\ \underline{op}.\ \underline{cit}.,\ p.\ 10.$ 

forthcoming if this support is to be maintained.

David Grossman stated that if a programming system were used effectively it could generate an action-oriented approach to problem solving. 62 It was concluded in the last chapter that regional planning will have to become more action-oriented if it is to generate an effective planning process. Consequently, it might be advantageous to consider Grossman's statements in more detail. As Director of the Community Development Branch of the Urban Renewal Administration, he has personally experienced how the programming system employed by the community renewal program has led to a community-wide program for renewal action. This system has succeeded in focusing the attention of both planners and decision-makers on the need to develop realistic proposals to solve renewal problems.

The development of an action-oriented planning process according to Grossman has been a causal factor behind the success of the community renewal program. The need for this type of process was considered vital to the success of the program by the Urban Renewal Administration. Grossman emphasized this fact when he said "in the fact of many unknowns, there is a great temptation to engage in research (often badly needed) and to avoid action. The ties of the CRP to the action process

<sup>62</sup> Grossman, op. cit., p. 268.

of urban renewal are vital, however, and must be given first priority."63

Likewise regional planners are often guilty of yielding to this same temptation - a situation which tends to obscure basic problems and their potential solutions. Consequently, the specific action-generating techniques employed by the CRP, and its counterpart community development programming, will be considered in more detail in the next chapter.

While the CRP has established the need for integrating programming and programmed action into the planning process, it has not for the most part developed adequate programming techniques. Yet such techniques should be developed for the programming needs of regional planning.

The Battelle study itself established the need for a fairly sophisticated programming technique when it noted that a "trade off" between investments in low-flow augmentation reservoirs and sewage treatment facilities would be required. This involves the need to program alternative courses of action through time. As far as the short-run period is concerned an improvement in the sewage treatment facilities would suffice; yet a reservoir would probably be required in the long run.

In the above situation, and a multitude of others like

<sup>63 &</sup>lt;u>Ibid</u>., p. 268.

it, there is a need to define both the short- and longrange implications of alternative courses of action. If this
is not done, the structuring of a rational decision-making
process would be impossible.

Where applicable the Commission is considering the feasibility of establishing special purpose authorities and commissions to help implement various segments of the regional plan. Tentatively mentioned has been a Regional Park Authority, a Regional Water Authority, and, among others, an Inter-County Highway Commission. 64 It will be the Planning Commission's job to coordinate the activities of each of these authorities. Due to a scarcity of resources (financial, legal, administrative, etc.) each authority will be limited in its ability to pursue its stated objectives. Unconsciously they will be competing against each other for those resources which are available. Consequently, it will be the Planning Commission's task to identify specifically what resources are available to pursue these objectives, and to establish a priority criteria for choosing between alternative projects and proposals.

If used effectively a programming system could provide the type of information which is needed both to maximize the allocation of those resources which are available and to foster

<sup>64</sup> Tri-County Regional Planning Commission, Staff Report # 2, op. cit., p. 10.

a rational decision-making process.

It was noted earlier that programming systems have been used quite extensively in various areas of planning. Some of the specific programming techniques utilized in these systems will be discussed in the context of their potential use in regional planning. Hopefully an analysis of these different techniques will provide a conceptual framework for establishing a regional development programming system. The next chapter will also consider the difference between planning, policy planning, and programming.

#### CHAPTER III

## CONCEPTUAL BASIS FOR A REGIONAL DEVELOPMENT

#### PROGRAMMING SYSTEM

American planning has not been particularly dogmatic. As new problems have arisen, the approach to planning - concepts, methods, administration - has changed to meet new challenges in the best possible way. Intellectually this may not be as satisfying as a more theoretical approach; on the other hand it is appropriate to the view that considers planning not as an end in itself but as a means towards the solution of a particular problem. In situations that are rapidly changing the experimental attitude is much to be preferred to the dogmatic. 1

John Bollens

The stated purpose of this chapter is to provide a conceptual basis for integrating a programming system into the regional planning process. The programming systems utilized by the community renewal program and the Department of Defense will be analyzed along with a proposed programming system for city planning. Each of these systems will be analyzed with reference to their historical basis of development, underlying concepts and emphasis, and innovative techniques. Hopefully this analysis will provide the basis for examining the following: defining and drawing a distinction between development programming and planning; analyzing why programming has not been used more extensively by planners; and considering the possibility of integrating a programming system into the regional planning process.

<sup>1</sup> John C. Bollens and Henry J. Schmandt, The Metropolis (New York, 1965), p. 326.

## The Community Renewal Program

#### Historical Basis

In 1959, there was a congressional amendment to the United States Housing Act of 1949, establishing a new federal grant to communities "for the preparation or completion of community renewal programs." The community renewal program (CRP) is a method for assessing a community's over-all needs for urban renewal and developing a staged program of action to meet these needs, commensurate with the resources available to the community.

There was a wide-spread concern in the federal government prior to this new amendment that federal renewal funds were not being used effectively. Leigh Curry, Chief Council of the URA, stated that "a decade of urban renewal had produced hundreds of projects, but relatively little evidence of a coordinated community-wide program of blight evaluation."4

This was due to the inherent limitation in the project-by-project or "projectitis" approach which characterized early renewal efforts. Consequently, the CRP was developed to provide a federally sponsored vehicle for a community-wide approach

<sup>&</sup>lt;sup>2</sup> Section 103 (d), <u>Housing Act of 1949</u> (Public Law 171, 81st Cong.) as amended by Section 405(3) of the <u>Housing Act of 1959</u> (Public Law 86 - 372).

<sup>3</sup> House and Home Finance Agency, Urban Renewal Administration, CRP: Community Renewal Program Policy, p. 2.

<sup>4</sup> Curry, op. cit., p. 3.

to urban renewal.

## Conceptual Basis and Emphasis

It was noted previously that the major characteristic of the CRP is its action-orientation. This emphasis on action can be traced to the Urban Renewal Administration's policy statements on the CRP. In the first place the URA felt that studying the renewal problem on an area-wide basis was not enough. It was also considered essential to have some assurance that the local community would follow through on implementing the total program and not just one or two "opportunity projects." Consequently, the URA built into the community renewal program the following policy specifications which were designed to encourage community-wide action. 6

The first of these specifications emphasized the need to develop realistic plans and proposals - ones that are capable of being achieved. The key to this lies in the URA's firm insistence on extensive studies and analysis of the community's resources and capacities. This involves two parallel activities. One is the calculation of the resources needed to carry out a complete program; the other is a con-

<sup>5</sup> Curry referred to Central Business District, Civic Center, or high-rent apartment projects, among others, as "opportunity projects."

<sup>6</sup> Housing and Home Finance Agency, op. cit., p. 3.

structive inventory of resources which will and can be produced for that purpose. 7

Realistic programming has been achieved in the CRP because of federal requirements that the community determine the following:

- 1) The impact of estimated community growth on the demand for land development and its significance for the marketing of cleared land in renewal areas.
- 2) The public costs of renewal action and the fiscal consequences - public borrowing, debt limits, changes in tax revenue - which will affect the rate at which the locality will be able to carry out renewal.
- 3) The magnitude of relocation created by proposed renewal action and the ability of the market to satisfactorily accommodate displaced families and businesses.
- 4) The adequacy of legal tools and administrative organization to take effective renewal action.
- 5) The capacity of citizens' groups to undertake supplementary action in support of renewal programs.8

<sup>7</sup> Curry, op. cit., p. 6.

<sup>8</sup> Jerone L. Kaufman, "The Community Renewal Program,"

American Society of Planning Officials Information Report # 157,

(Chicago, 1962), p. 8.

The second policy specification emphasizes the need to perform community renewal programming on a continuous basis.

This was based on an awareness that community renewal problems and potentials are continually changing. Consequently there is a need for a periodical revision and review of the program.

A number of the larger cities have developed systematic data and information systems in response to this need. Most of these systems have in common the following functions: 1) to monitor current conditions, problems, and trends, 2) to prepare key indicators of change in order to alert the community to certain maladjustments and 3) to evaluate progress of the recommended programs and assess its impact as a guide to future growth. 10

Another policy specification refers specifically to the end product of a CRP. URA stated that the ultimate objective of these programs is to integrate all of the studies, surveys, and analyses which are undertaken into a feasible action program that will give both direction and meaning to urban renewal activities. This program, in accordance with URA's directives, "should designate the type of renewal treatment appropriate to each area, assign priorities for renewal action, set forth time sequence schedules of action, and be specific and definite about

<sup>9 &</sup>lt;u>Ibid.</u>, p. 10.

<sup>10</sup> Robinson, op. cit., p. 306.

<sup>11</sup> House and Home Finance Agency, op. cit.

near future action."12

In summary, the CRP represents an integrated programmatic approach to community renewal, embracing and relating all aspects of the process - renewal and redevelopment projects, major public facilities, new housing, economic development, and so forth. 13 Conceptually it established a realistic long-term schedule for action and, at the same time, provides for periodic review and modification in the light of experience and changing conditions.

### Innovative Techniques

It is a policy of the Urban Renewal Administration "to encourage the use of CRP for the development of new ways of analyzing and improving the condition of life in the urban environment." This has generated a number of pioneering efforts by several of the larger cities to experiment with new techniques and methods. In some cases these techniques are directly related to the programming process.

Both Pittsburgh and San Francisco have developed mathematical models to simulate the workings of the city.

Conceptually these models will provide a replica of the real

<sup>12</sup> Robinson, op. cit., p. 308.

<sup>13</sup> Fredrick O'R Hayes, "Coordinating Planning and Renewal," Planning 1962, (American Society of Planning Officials, 1962), p. 39.

<sup>14</sup> Grossman, op. cit., p. 264.

world which will permit the testing and evaluation of alternative renewal policies and actions. 15

Patterned on systems evaluation techniques created by the Department of Defense, Philadelphia developed a programming technique which measures and evaluates the relative costs and benefits of alternative courses of action. They have developed a series of "programming plans" for each program which is concerned with housing and the physical environment. The subject matter of these plans includes a description of the program, its objectives, the legal basis for involvement, the preconditions for effectiveness, its relationship to other programs and agencies, specific targets for accomplishment, methods of evaluating its ability to achieve the desired results, the resources required for completion of the present authorized program as well as the proposed one, and the current cost of the program. 16

### Community Development Programming

#### Historical Basis

In an article in the Journal of the American Institute of

<sup>15</sup> See Wilber A. Stegar, "The Pittsburgh Urban Renewal Simulation Model," <u>AIP Journal</u>, Vol.31, (May 1965), pp. 144-149, and Ira M. Robinson, "A Simulation Model for Renewal Programming," <u>AIP Journal</u>, Vol. 31, (May 1965), pp. 126-134.

<sup>16</sup> Community Renewal Program, Philadelphia, "Program Plans for Development Activity," (undated, mimeographed), p.3.

Planners, (November 1965), Ira Robinson stated that the CRP with its shortened time-horizon and programmed action, has "resulted in a re-examination of many traditional city planning approaches and methods that we have taken for granted, and it has introduced new and powerful techniques potentially useful for urban analysis and planning in general." He stated that even though the success of these CRPs is still being determined, "it is hoped that they will lead to the next logical setp in city planning" what he called "community development programming."

## Conceptual Basis and Emphasis

community development programming (CDP), as proposed, would involve basically the same programming system as utilized by the community renewal program, but expanded in scope and function. Robinson feels that CDP should be a continuous process of city government which is concerned with programming all programs and activities which directly or indirectly affect the economic, social, and physical renewal and development of the city. ODP, as proposed, would involve the following activities:

1) Continuous identification of the city's major problems.

<sup>17</sup> Robinson, op. cit., p. 305.

<sup>18</sup> Ibid., p. 305.

<sup>19 &</sup>lt;u>Ibid.</u>, p. 309.

- 2) Continuous identification of the city programs to deal with these problems.
- 3) Continuing collection of pertinent information.
- 4) Dissemination of this information to both the public agencies and the public at large.
- 5) Continuing policy analysis and revision.
- 6) Annual determination of program objectives and targets.
- 7) Assembly and recommendation of an annual budget, policy guide, and a six-year schedule of the elements of the program.
- 8) Annual review of the six-year program.<sup>20</sup>

  The end product of CDP would be an officially adopted policy guide and program consisting of the following components as defined by Robinson.<sup>21</sup>
  - 1) Specification of the problems to be treated in the ensuing period and a detailed policy statement regarding the local government's approaches to alleviation of the problems.
  - 2) A set of timed-objectives and operating targets to

<sup>20</sup> Ibid., p. 309.

<sup>21</sup> Ibid., p. 309.

guide the city's development and renewal investments for the following six years - the objectives and targets to encompass economic and social, as well as the physical aspect of the city.

- 3) An itemized list of the specific public and private actions that will contribute to accomplishing the objectives.
- 4) A time-phased and costed set of public programs to be carried out by various departments and agencies over the future six-year period, including a statement of each program's objectives, the agency responsible for its execution, the foreseeable performance targets of each program, the method of evaluating performance, and cost of the program by year over the six years.
- 5) An adopted budget and action plan for the first year of the six year program.

Robinson feels that while CDP represents a major innovation in city planning, it will be accepted due to an increased public awareness of urban problems, a growing recognition of the role of planners in solving these problems, and an "uneasy impatience and skepticism about some of the traditional planning tools."22

<sup>22</sup> Ibid., p. 309.

The over-all programming process, as proposed, would be coordinated by a Development Director or Programmer. Such a person would have to be trained in a different manner than that of most planning schools today. It was noted, however, that some of these schools are moving in the right direction with an increased emphasis on model building, systems analysis, social-economic processes, etc. 23

#### Innovative Techniques

Since community development programming is still in a conceptual non-operative phase of development, it is necessary to speculate on the specific techniques which it could utilize. Among those mentioned by Robinson are simulation, cost benefit analysis, and mathematical models.

#### Program Budgeting

#### Historical Background

In 1954 the RAND Corporation published a report<sup>24</sup> which suggested a new method for considering resource requirements in military planning, a method called "program budgeting." This report was based on the recognition of a deficiency which existed

<sup>23 &</sup>lt;u>Ibid</u>., p. 311.

New Budgeting and Accounting Procedures, (Santa Monica, California: The RAND Corporation, 1954).

in relating military budgeting to planning. This deficiency was exemplified in World War II in the form of dissatisfaction with the handling of material and manpower problems.<sup>25</sup>

Prior to 1961 there was almost a complete separation between planning and decision-making on weapon systems and forces. on the one hand, and budgeting on the other. Long-range planning was undertaken by the individual services on the basis of estimated number of forces required to assure our national security, while the defense budget was computed by the Administration primarily on the basis of how much the economy could bear. 26 It was the task of the Secretary of Defense to first bring the over-all defense budget in line with the administration's fiscal policy, and then divide the total budget up among the three military departments. For all practical purposes, these departments could allocate the funds as they saw fit. Each department tended to favor its own area and interests without due concern for the over-all military objectives. Likewise, the budget was projected for only a oneyear period so they were unable to consider the future resource implications of proposed action.27

When Secretary of Defense McNamara took charge of the Department of Defense, he insisted upon both the centralization

<sup>25</sup> David Novick, (ed.), <u>Program Budgeting</u>, (Santa Monica, California: The RAND Corporation, 1964), p. 51.

<sup>26</sup> Alain C. Enthoven in an address before the American Economic Association, Pittsburgh, Pennsylvania, December 29, 1962.

<sup>27</sup> Novick, Program Budgeting, op. cit., p. 54-5.

of management and the use of scientific approaches to decisionmaking. With these objectives in mind, McNamara was resolved
to bring about certain changes in the Pentagon that would
facilitate orderly procedures for translating strategic
objectives into budgets. The concept of program budgeting
was introduced to McNamara in 1961 by his Comptroller, Charles
Hitch, for Hitch was previously the RAND Corporation's Chief
Economist. Within six months this system was put into operation.

Program budgeting is now firmly established in the Department of Defense and appropriate steps have been taken to integrate
this system into every federal department and agency. 29

#### Conceptual Basis and Emphasis

The underlying concepts behind program budgeting are based upon a recognition that there is an indissoluble connection between budgeting, policy formation, and the solution to governmental problems. Governments at every level "... are constrained by the scarcity of economic resources at their disposal. Not only the extent to which they pursue particular objectives, but the character of the objectives themselves, will be influenced by the resources available. On the other hand the extent to which the

<sup>28</sup> Daniel Seligman, "McNamara's Management Revolution," Fortune, (July 1965), p. 118-119.

<sup>29</sup> President Johnson announced at his news conference on August 25, 1965 that program budgeting was to be introduced into the entire federal establishment.

government desires to pursue its objectives will influence the resources it makes available to itself by taxation and other means."<sup>30</sup> The following tasks of program budgeting can be fairly well defined in relationship to the above statement:

-Because of a scarcity of resources, each government is forced to make compromises among its stated goals and objectives. The primary task of program budgeting is to help make these compromises. It provides for a comparison of various activities in terms of their contribution to the stated objectives.

-A second task of program budgeting is to define exactly what additional resources will be needed to meet the stated objectives; conversely it will also help determine how given objectives can be obtained with minimum expenditure of resources.

-A third task is to project government activities over an adequate time period. Likewise, it facilitates the revision of objectives, programs, and budgets in the light of experience and changing circumstances.31

The program budgeting system is divided into three distinct processes: planning, programming, and budgeting. For the purposes of illustration each of these processes will be discussed in the context of how they actually function as a system in the Department of Defense.

<u>Planning</u> - For the purposes of program budgeting the term planning is defined as "...the production of the range of meaningful potentials for selection of courses of action through a

<sup>30</sup> Novick, Program Budgeting, op. cit., p. 2.

<sup>31 &</sup>lt;u>Ibid.</u>, p. 58.

systematic consideration of alternatives."<sup>32</sup> This process involves the identification and analysis of military objectives and the various programs needed to achieve these objectives. Each of the military plans is divided into broad "program missions" (e.g. Strategic Retaliatory Forces, Civil Defense, Etc), then subdivided into "program elements" (e.g. Atlas missile, Polaris, etc.)<sup>33</sup> Planning decisions are made after comparing the estimated cost and benefit to be derived from alternative programs or courses of action.

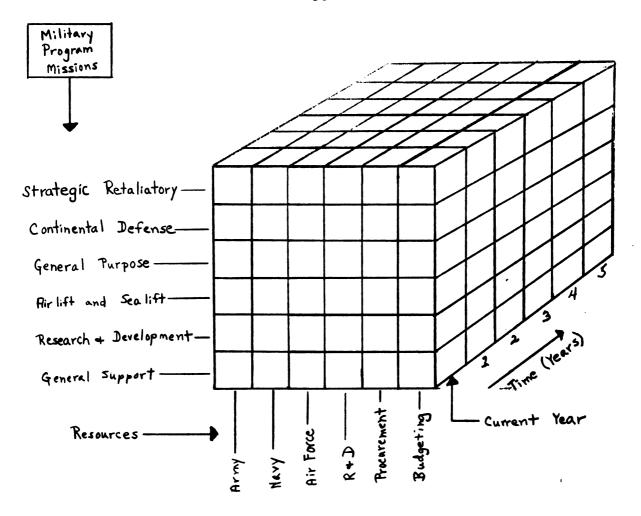
Programming - The definition of programming is "...the specific determination of the manpower, material, and facilities necessary for accomplishing a program."<sup>34</sup> Military programming can be illustrated in the form of a conceptual model, as diagrammed below.<sup>35</sup> The elements of this model are resources, program missions, and time. This results in a three-dimensional relationship with the boxes being filled with the number of dollars needed to perform each function. The purpose of this model is to integrate long-range decisions with everyday operating

<sup>32</sup> Ibid., p. 58.

<sup>33</sup> Seligman, op. cit., p. 119.

<sup>34</sup> Novick, Program Budgeting, op. cit.

<sup>35</sup> Technology Planning Center, Inc., A Compendium of Information Planning Concepts and Applications, (Ann Arbor, Michigan), (An unpublished report), p. II - A - 4.



#### CHART II

decisions. An understanding of the basic relationship between time, resources, and program missions should facilitate a more rational decision-making process for both short- and long-range decisions of a planning or budgeting nature. 36 Conceptually the

<sup>36 &</sup>lt;u>Ibid</u>., II - A - 3.

process involved in filling in the boxes of this model can determine scientifically exactly how much money will be necessary in a specific amount of time for each individual program, the resources needed to carry out this program, and, for that matter, the entire scope of a given program over a given amount of time.37

Budgeting - The function of the budgeting process is to take broad program decisions, translate them into more refined decisions in a budget context, and present them to the decision-maker for appropriate action. The budgeting process in program budgeting is not inherently different than traditional methods; yet it is based on more complete information about alternative programs and alternative courses of action. 38

#### Innovative Techniques

Integrated into the program budgeting process are a number of analytical techniques which are designed to systematically examine alternative courses of action. Of all these techniques, cost-utility analysis<sup>39</sup> is the one used most extensively. This analysis can be defined as the "systematic examination

<sup>37</sup> Memorandum from: the Executive Office of the President, To: the Heads of Executive Departments and Establishments. Subject: Planning-Program-Budgeting, (October 12, 1965), p. 2.

<sup>38 &</sup>lt;u>Ibid.</u>, p. 2.

<sup>39</sup> This type of analysis has been undertaken extensively in other areas of planning. It is often referred to as costbenefit or cost-efficiency analysis.

and comparison of alternative courses of action that might be taken to achieve specific objectives for some future time period."40 The purpose of cost-utility analysis is not to make decisions, but rather to provide the decision-maker with the information he needs to sharpen his intuition and judgment.41

Cost-utility analysis has been made workable because of the development of new decision-making tools such as mathematical programming. When faced with a problem of many interlocking aspects, mathematical programming defines in mathematical terms a program that meets the minimum requirements needed to overcome the problem irregardless of the cost or benefits, and then tries, one by one, various changes in this program that may reduce the cost or increase the benefits.

The program budgeting process also makes extensive use of the analytical tools of PERT (Program Evaluation Review Technique) and CPM (Critical Path Method). These tools were initially developed to take into account the many subsystems and variable components involved in the design and production of complex weapon systems. Both of these techniques utilize a flow diagram of sequential activities and events necessary to attain some clearly defined end objective. An event represents a specific program accomplishment at a particular in-

<sup>40</sup> Novick, Program Budgeting, op. cit., p. 47.

<sup>41 &</sup>lt;u>Ibid.</u>, p. 47.

stant in time. An activity represents the time and resources which are necessary to progress from one event to the next.42

## Adaptation of These Programming Systems to Regional Planning

Conceptually most of these programming techniques discussed above could be utilized in a regional programming system. It must be recognized, however, that practical limits would be involved in considering some of these techniques on a conceptual basis only. Quite obviously, the degree of central management and control is considerably greater in the Department of Defense than a regional planning agency. Consequently, the remaining portion of this chapter will attempt to define some of the practical limits of utilizing these techniques in regional planning. Hopefully this will provide the framework for designing a regional programming system which is both workable and feasible.

One of the major obstacles to the utilization of these programming techniques is the limited advisory role of regional planning. In an Urban Renewal Administration policy statement it was noted that:

"Studies, research, and advisory materials may disregard political boundries; programs for action may not. To the extent that the community renewal

<sup>42</sup> Ibid., p. 35.

program is to produce a commitment to meaningful urban renewal action, it must deal with a unit of government which can act - a political entity which can not only plan, but also raise money, enforce codes, clean slums, rehabilitate neighborhoods, etc."43

Consequently, many of the techniques used by the CRP to generate action will not necessarily be as successful if utilized in regional planning. While there is no assurance that a regional planning proposal will be accepted, this proposal must at least be in an acceptable form. This is especially critical since a regional planner must rely upon the power of persuasion to implement his plans.

Another one of the major obstacles to the utilization of these techniques is the balkanization of the metropolitan region. Benjamin Chinitz and Charles Tiebout consider this situation in the context of using cost-benefit analysis in a metropolitan area:

"Given the balkanization in metropolitan regions and the demand to provide some area-wide services, how can we determine which services ought to be provided, and how should the cost be apportioned to separate fiscal units? Since cost-benefit analysis has been used for evaluating other aspects of the public economy, perhaps ....it can be applied at the metropolitan level. Such an application....is not at all easy; even at the conceptual level....there are (too many) problems in finding rules to allocate resources....and in determining the share of cost between communities. At the empirical level, measurement problems abound. At this stage of our study, about all we can suggest are some proxy variables.

"In spite of these somewhat pessimisstic results, we

<sup>43</sup> Curry, op. cit., p.7.

definitely do not conclude that cost-benefit analysis is of no value...The alternative usually turns out to be some measurement by non-economists of 'needs'. Professional snobbery set aside, this is often even more misleading than crude economic estimates."44

The conclusions of the above statements can be uniformly applied to most of the decision-making tools previously discussed. While some of these tools can not be as effectively used in regional planning as in other areas of planning, this does not necessarily discount their use entirely. For example, PERT and CMP, as used in program budgeting, involve complex mathematical formulas. In this context their use in regional planning is limited; yet potentially they could be used effectively as non-mathematical flow diagrams illustrating the relationship between various events and activities.

Prior to developing a regional development programming system it is necessary to define specifically what is meant by development programming. Programming involves a process of determining sequentially what activities and events need to be undertaken to achieve desired goals and objectives. Compared to planning which has historically emphasized a technical concern of plan-making, programming involves the development of a strategy for plan implementation.

<sup>44</sup> Benjamin Chinitz and Charles Tiebout, "The Role of Cost-Benefit Analysis in the Public Sector of Metropolitan Areas," The Public Economy of Urban Communities, Paper presented at the second conference on Urban Public Expenditures, (Wash., D.C., Resources for the Future, Inc., February 1964), p. 259.

Planning, programming, and policy planning should be considered as integral parts of an overall process. Planning, as traditionally practiced, involves the development of a plan; programming places the specific activities and events needed to implement this plan in the proper time context; while policy planning defines these activities and events as specific policy statements for decision making considerations.

There are two basic reasons why programming has not been used more extensively. In the first place planners have traditionally placed more emphasis on spacial rather than time relationships. Secondly, planners have been hesitant to become politically involved. To have a successful programming system, the planner needs to work closely with the power structure of the communities involved when developing a strategy for future governmental activities. Unfortunately, this lack of political involvement is also a major reason why planning efforts have not been more successful in the past.

The specific programming concept and techniques discussed in this chapter will provide the basis for developing a regional programming system in the next chapter. Hopefully this system will facilitate a more effective plan implementation process.

#### CHAPTER IV

## A PROPOSED REGIONAL DEVELOPMENT PROGRAMMING SYSTEM

#### Regional Development Programming System

It is evident that the ability of a regional planning agency to solve the complex problems of our metropolitanregions depends to a large extent upon the means which are chosen to solve these problems. Previous chapters have illustrated the inherent limitations in the traditional "research, advice, and publication" approach to regional planning.
Consequently, there is a need to develop new approaches based on new methods, if regional planning is to become an effective force in generating solutions to area-wide problems.

A systematic approach to programming was introduced as one of the more promising new techniques in the field of planning. While systematic programming has been used quite extensively in other areas of planning, it has not been directly applied to regional planning as yet. It has been the major concern of this thesis to explore the possibility of utilizing a programming system in regional planning. The programming needs of regional planning were considered previously along with a description of existing programming systems. The emphasis in this chapter will be focused upon proposing a Regional Development Programming system for regional planning in general, and the Tri-County Regional Planning Commission

more specifically.

Regional development programming (RDP) involves a process of formulating, maintaining, applying, reviewing, and overseeing the regional development program. The regional development program, on the other hand, is a time-phased network of policies and programs designed to guide both regional planning activities and actions. For introductory purposes the discussion of RDP will be divided into two distinct parts. The first part will be in the form of procedural guidelines for integrating a programming system into the Tri-County Regional Planning Commission's planning process. The emphasis in the second part will be focused on identifying some of the potentials and limitations of this programming system.

# Part I: A Proposed Regional Development Programming System for the Tri-County Region

The specific purpose of regional development programming is to provide a systematic approach to plan implementation.

RDP, as proposed, will provide the means for refining both the Comprehensive Plan into short-range plans and these short-range plans into action policies and proposals on an annual basis.

The first step of the programming process involves the establishment of a proper organizational framework.

After completing the regional comprehensive plan the Planning Commission should have some concept of the specific types of activities which will be required to implement these

plans. For programming purposes these activities should be functionally grouped into a series of out-put-oriented program categories, which together, cover the Commission's total work. The following principles patterned after the program structure of program budgeting should guide the development of these program categories. The latter are a grouping of the Commission's activities or operations which serve the same broad objectives or which have generally similar objectives. There are three types of program categories: action, administrative, and supporting programs. For a hypothetical example see the diagram on the following page. (CHART III)

These categories will provide the organizational framework for the remaining phases of the planning process. Different
members of the planning staff will coordinate the activities
within each program while the coordination between the programs
will be the responsibility of a Programming Director. Once
these organizational requirements have been met the Commission
can proceed into the first phase of the programming process the formulation of a preliminary program plan.

<u>Preliminary Program Plan</u> - A specific plan should be formulated for each of the action program categories defined above. These plans have two major functions. The first is to determine the

<sup>1</sup> Memorandum from the Executive Office of the President, op. cit., pp. 3-4.

# PROGRAM CATEGORIES

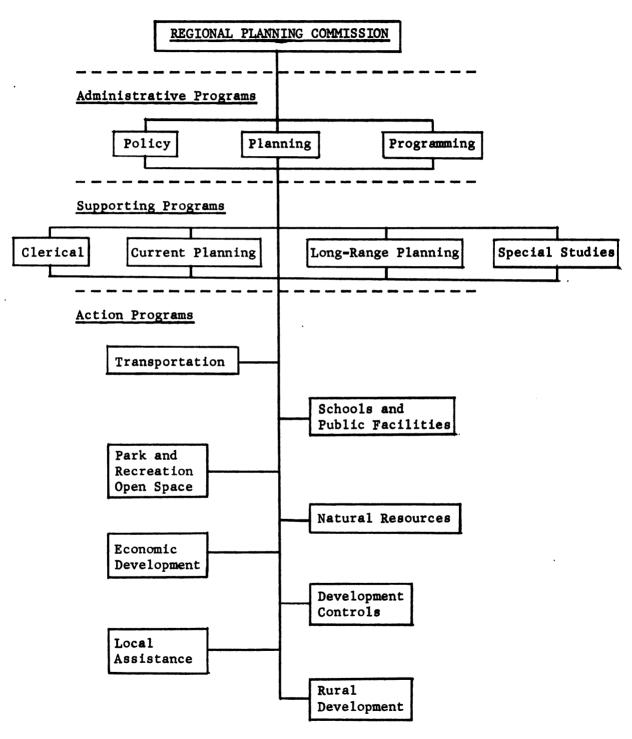


CHART III

specific planning operations and activities which will need to be undertaken to meet the long-range objectives and recommendations of the Comprehensive Plan. The second is a determination of the resources which will be required to carry out a complete program. The following programming activities, involved in the formulation of these program plans, will be illustrated in the context of how this programming system could potentially be utilized to help implement Battelle's Water Study.

Step 1 - Program Consideration of the Comprehensive Plan should be summarized in terms of goals, objectives, recommendations, conclusions, and problems. Proper identification of all the elements listed above is critical to an effective programming process. The recommendations and conclusions of the Battelle Water Study, for example, will provide a framework for determining development goals and objectives, which, in turn, will guide future water resource development decisions. Development standards and problems, on the other hand, will provide the basis for reviewing and measuring past program performances. The adoption of these recommendations as official policy statements should be an integral part of a policy planning process.

Step 2 - There should be a determination of the specific program elements (activities and operations) which will be required to meet these long-range goals and objectives.

The technical-professional training and experience of the planning staff should provide the basis for defining specifically what activities and operations will need to be undertaken to achieve long-range goals and objectives. Within the context of the Battelle Study it might have been both possible and beneficial to have retained the consultant to help define these program elements.

Step 3 - The resources required and available to perform each of these program elements should be determined.

Each of the activities or operations which are undertaken in the pursuit of given objectives will require the expenditure of resources of one kind or another. For example, one of the recommendations of the Battelle Study

elements of this program would be flood plain zoning.

The resources needed to perform flood plain zoning would include the legal basis for this type of control; the public cost of carrying out a study to delineate flood plain areas; the administrative and staff requirements of such a study; and the cost of administering flood plain zoning on a continuing basis. At this stage of the programming process a determination of required resources should be more generalized than detailed in nature.

was a flood-control-action program, 2 and one of the

<sup>2</sup> Battelle, op. cit., p. 11.

Step 4 - A time-sequence network diagram should be drafted illustrating the basic relationships between program elements. This network diagram will relate the various program elements to each other through time. A simplified example of such a diagram is illustrated in Chart IV, utilizing the basic elements of a flood-control-action program.

Step 5 - A determination of priorities between program elements should be undertaken on the basis of need; resources available; political, financial, and legal expediency; and functional relationships between these elements. Using the same context as described above, this process is schematically diagrammed in Chart V. The following comments are made in reference to this diagram. The advising of local governments requires very little expenditure; therefore it should be undertaken first. The flood plain analysis will require a large expenditure of resources, yet it is necessary to the entire program. Consequently it was given a relatively high priority. Potentially a diversion channel would contribute more to the over-all goal of flood control and prevention, but the establishment of flood plain zoning was given a higher priority because it would be more financially expedient. These and a miltitude of similar value judgements should be determined during this step of the programming process.

CHART IV

TIME-SEQUENCE NETWORK DIAGRAM

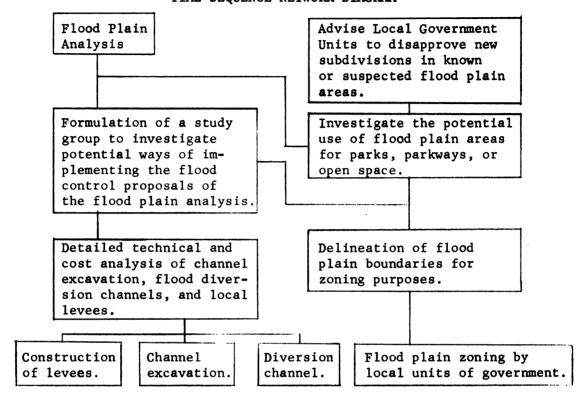
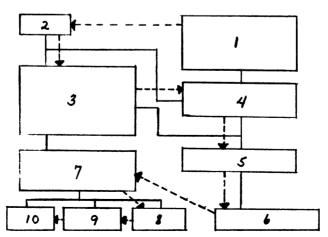


CHART V

SCHEMATIC PRIORITY DIAGRAM (Based on Chart IV)



Collectively these preliminary program plans will provide the basis for formulating the short-range development plans - the next stage of this proposed regional development programming system.

# Short-Range Development Plans

The primary function of these short-range plans is to relate the separate program plans to each other and to the limited supply of resources which are available. As proposed, they would involve the following sequential steps.

Step 1 - Both the financial and legal capabilities of the local governmental units to support a planning program, and the administrative capability (staff, budget, etc.) of the Commission to sponsor such a program, will be assessed. A financial and legal capability study should be undertaken to determine what resources are available to support a planning program. Along with an assessment of the financial capability of each of the local governmental units, this study should define potential state and federal funds which are available in specific program areas. Step 2 - The priority diagrams from each of the program plans will be united into a single diagram. To a certain extent there will be an adjustment of each of these diagrams due to activities or operations which are inter-programmatic in nature. For example, flood plain zoning would be an

integral part of both the natural resource and development control programs. If it were given a high priority classification in the natural resources program and a low priority in the development control program, one or both of the priority diagrams involved would need to be adjusted. Adjustments will also be made in accordance with the results of the financial and legal capability study. The possibility of receiving state or federal funds, for example, could materially affect the priority rating of a program.

Step 3 - The formation of short-range development plans. The primary function of these short-range plans is to bridge the gap between the operating decision of government and the long-range comprehensive plans. An emphasis should be placed on producing plans of programmed action which maximize the allocation of a limited supply of resources. They will be based on the priority diagrams described above and the availability of resources.

In actuality these short-range development plans would still have to be classified as being more technical than action-oriented. A regional plan will not become action-oriented until it has the official support of the local governmental units which possess the powers of implementation. Gaining this support and developing a strategy for plan implementation based upon this support is the primary task of the regional development program.

Regional Development Program - The regional development program involves a process of developing both a preliminary and final strategy for the implementation of each of the action programs defined above. These preliminary reports would be prepared by the professional staff on an annual basis and would be based upon the short-range development plan. Included in this report will be a statement of objectives, a description of the program, the legal basis for involvement, specific targets for accomplishment, its relationship to other programs, an evaluation of previous accomplishments, and a detailed summary of the resources required to carry out this program, both financial and administrative.

In effect this preliminary report would represent the Planning Commission's proposed annual strategy for plan implementation based upon the technical findings of their planning program. This report would specify the proposed role of the local governmental units based upon both individual and cooperative efforts. Yet their efforts would be related to both a short- and long-range planning program.

As proposed, the Planning Commission would then present these preliminary reports to the local governing bodies with a request that they appoint an official representative to help develop a strategy of plan implementation. After reviewing this report with the Planning Commission and staff, these representatives will be asked, for and with the support of their governmental bodies, to do one or more of the following: agree to

perform certain tasks; agree to financially support proposed region-wide planning efforts; adopt certain segments of the plan as official policy statements; or provide alternative recommendations and strategies in light of individual considerations. Although a complete concensus will probably never be reached on all or even most of the issues, this process will hopefully provide the basis for a common understanding, and at least partial cooperation between the local governmental units and the Planning Commission. The results of this process will be summarized in a document similar in context to the preliminary report, yet based upon a general concensus of support by the local governmental bodies.

An annual program of this nature is considered necessary because of the inherent limitations of regional planning. For example, it is difficult to predict whether a Metropolitan Water Authority will require a six-month or six-year period to become accepted by the local government units. Consequently the plan must be kept flexible and readily adaptable to changing circumstance through an annual review and appropriate restructuring of its programs. The accomplishments of a regional plan more than likely will be very sporadic and unpredictable, and thus its annual programs should be designed to accomodate these changing patterns. A five-year plan alone would tend to become meaningless during the third or fourth year without an annual review of its programs.

Structuring these development programs on an annual basis would also have a potential advantage of having these programs integrated into the budgetary process of the respective local governmental units. Many of these local units would otherwise be hesitant to financially commit themselves for more than one year.

At the end of the second chapter of this thesis it was concluded that a regional programming system was needed to accomplish the following tasks:

- -To generate a more action-oriented planning process.
- -To identify both the short- and long-range implications of a planning proposal as a step toward a more rational decision-making process.
- -To help maximize the allocation of a limited supply of resources.

From the brief description of the proposed regional development programming system presented above, it is difficult to assess how effective it could be in accomplishing any one or all of these tasks. Consequently the remaining pages of this chapter will discuss both the potentials and problems of this proposed programming system.

# Part II - Potentials and Problems of This Regional Development Programming System

The potentials of regional development programming cannot be accurately assessed until it is tested in the "real world".

There is, however, an inherent logic within its underlying concepts which should provide a basis for speculating on its potential effectiveness.

It has been emphasized a number of times in this thesis that regional planning will have to become more action-oriented if it is to be effective. It was also noted that the programming system utilized by the community renewal program has successfully generated an action-oriented renewal process; therefore it seems only logical that a programming system should have similar results for regional planning. This logic, however, tends to break down when it is considered that the agency administrating the CRP has the basic power to take action while the regional planning agency does not. This leaves us with the same basic question of whether a regional programming system can generate the action which is required to accomplish the stated goals and objectives of regional planning.

Conceptually, there are three inherent characteristics of RDP which should facilitate an action-oriented planning process. The first is the organizational framework of the proposed system. The concept of separate programs is especially significant. The mere fact that the system requires that all of the long-range goals and objectives be broken down into program categories and program elements tends to make planning more action-oriented. This will focus the attention of the staff, Commission, and local decision-makers on the specific activities

and actions which will be required to meet an established end.

Local governmental units could more easily be persuaded to take action on a particular proposal if its separate actions were related to an over-all strategy or scheme. This would also be true in the case of state or federal governmental participation in regional planning.

The second inherent characteristic is the emphasis which is placed on making planning proposals both realistic and feasible. Integrated into this programming system are extensive studies and analyses of the resources needed and available to undertake these planning proposals. In cases where resources are needed and not available this system would facilitate the consideration of alternative financial, legal, and administrative arrangements for more effective plan implementation.

The third characteristic is the end product of this system - the regional development program. This program represents a strategy for plan implementation which is based upon a general concensus of the local governmental bodies.

The identification of the activities and operations which will be needed to obtain long-range goals and objectives will not only foster a more action-oriented planning process, but it would also foster a more rational decision-making process. Programming, by definition, is a process of selecting between alternative courses of action. The sequential network diagram of these activities and operations would provide a basis for

determining both the public costs and benefits of different activities and actions.

Potentially, these alternative courses of action could be tested through operational gaming simulation. M.E.T.R.O. is a research project sponsored cooperatively by the Housing and Home Finance Agency, Michigan State University, University of Michigan, and the Tri-County Regional Planning Commission, to simulate the decision-making process in a metropolitan region. It represents an attempt to create an abstract representation of the "real world" situation in order to analyze the effects of certain policy decisions on the urban growth pattern of the region. It can demonstrate to local decision-makers the long-range implications of their individual activities and actions.

Conceptually, a more realistic decision-making process would be facilitated because of the strong emphasis which is placed on maximizing the allocation of resources through time. If used effectively this system would determine how given objectives can be obtained with a minimum expenditure of resources through the use of timed objectives and operating targets. Likewise, a systematic approach to the establishment of priority among program elements would provide a basis for appraisals and comparisons of various activities and operations in terms of their contribution to the over-all planning objectives.

<sup>3</sup> Tri-County Regional Planning Commission, Study Design, op. cit., p. 20.

From the above discussion it can be concluded that regional development programming represents a promising new approach to the field of regional planning. It must be recognized, however, that it is not a simple proposal for improvement in planning administration, easily designed, readily installed and promptly effective in operation. Quite the contrary, from the initial conception to the final implementation this programming system will have some difficult and important problems which must be recognized.

One of the basic problems involved in integrating a development programming system into the regional planning process is a lack of specific guidelines or techniques for such an undertaking. In the third chapter, many of the techniques utilized in other programming systems were introduced as potentially being applicable for regional planning. Most of these techniques stress the importance of rational decisionmaking and problem-solving. It was noted, however, that the limited advisory role of regional planning and the balkanization of the metropolitan region represent major obstacles to a search for effectiveness. This should not, however, discourage potential efforts toward making regional planning procedures and methods more compatible with the emerging theories of rational decisionmaking and problem-solving. Regional development programming with its focus on shortened time-horizons and programmed action can potentially help bridge the gap between ineffective and effective regional planning.

### Conclusion

It has been demonstrated that the traditional "research, advice and publication" approach to regional planning has been unable to generate the inter-governmental cooperation and action which is needed to solve the complex problems of our metropolitan regions. Furthermore, this cooperation and action will not be forthcoming unless a new approach is conceived that is more action-oriented in nature. Too often in the face of many unknowns there is a tendency on the part of the regional planner to engage in seemingly continual research while avoiding action. Consequently there is a need to redirect the focus of these planners from an emphasis on technical plan-making to an emphasis on plan-effectuation. In response to this need a regional development programming system has been proposed.

Regional development programming is a systematic approach to problem-solving and the selection of alternative courses of action through time. The proposed programming system itself is not as significant as its two major underlying concepts of: a "shortened time horizon" for planning, and the need for "programmed action."

Regional development programming is based on the need to "bridge a gap" between the developmental policies of government and the long-range comprehensive plan. These long-range plans commonly reveal a desired future state of affairs, but because of their long-range nature they rarely specify detailed courses of

action needed to achieve this state. Consequently a short-run development plan (5 to 10 years) is needed to act as a compromise between immediate problems and long-run expectancies.

Regional development programming is also based on the concept of "programmed action." Before planners can actively strive to achieve thier long-range goals and objectives, it is necessary to identify the specific activities and actions which will need to be undertaken in pursuit of these long-range considerations. The planner must also recognize that the resources available to undertake these activities and actions are limited. Consequently it is necessary to identify alternative courses of action and to select between these alternatives on the basis of maximizing the allocation of those resources which are available. Directly related to this is the need to develop realistic and feasible plans and proposals - ones that are capable of being achieved. The key to this lies in the identification and analysis of the resources needed and available to undertake a planning program.

If nothing else it is hoped that this thesis will help stimulate a reexamination of many of the traditional approaches and methods of regional planning. New approaches and methods will have to be forthcoming if regional planning is going to meet the challenge of ever-expanding urban complexes.

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