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"Social and Economic Programming and Urban Design"

BY

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INTRODUCTION

The material for this paper and the process described is in a constant state of evolution, being expanded and refined as experience and exposure is gained in each new community project undertaken. My personal experience and exposure to the planning of new communities consists of six years with The Rouse Company in planning for Columbia, Maryland, and recently providing consulting services to new community developers, including St. Charles Communities in Maryland and Flower Mound near Dallas, Texas, the second and fourth to be approved by HUD under Title VII New Communities Guarantee. In addition, I am presently involved in a team approach to consulting services in the planning of the Woodlands, a large new community near Houston, Texas, and in full services to the developers of Gananda, near Rochester, New York; Peachtree City, south of Atlanta, Georgia; Rock Creek, near Greensboro, North Carolina; and The Highlands, near Troy, New York. The diversity of these projects in terms of location, size, scale, market and developer motivations has provided a unique opportunity to progressively test and implement the materials and processes described here. It is important to realize that, as you are reading this paper, some of the material and methods contained have been further refined and expanded, based on constantly applied experience.

The economic and social programming of a new community as input to the urban designer for the creation of a physical development program and plan is the subject of this paper. An attempt will be made to simplify this extremely complex process -- complex because it involves the workings of many professionals in many disciplines in an effort to focus in on a subject that is so all-encompassing that it occasionally staggers the imagination. Often during these processes we are required to step back, reevaluate, simplify, and break down the data into manageable chunks. Hopefully, much of this programming material will be computerized to enable us to handle the complex interrelationships brought forward. The highly simplified chart shows the relationship between the three major professionals in the new community programming and design process -- the urban designer, the urban economist, and the urban social scientist.

This paper is divided into three sections, the first describing briefly the urban designer's preparatory work; the second dealing with the relationship between the urban designer and the urban economist; the third dealing with the relationship between the urban designer and the urban social scientist.

The material presented concerns itself only with the pre-development design stages of the new community process; that is, the creation of a program upon which a physical development plan is created. It does not discuss the process during the actual development period of the new community.

The methodology employed by the urban economist, urban designer, and urban social scientist, is subdivided into work phases illustrated in the diagram. In the paper, each phase of work and its relationship to other phases will be discussed and occasionally elaborated on.

1. URBAN DESIGN PREPARATORY WORK

Inventory Phase 1 has as its primary purpose the bringing together of all the project management people and various professional consultants to discuss and review the general goals of the developer, and to get to know each other. At the same time they become familiar with all of the data resources in the area in which the new community is to be located, as well as acquainting themselves with the region and specific site area itself. During these meetings, the purpose, goals, and overall cooperative posture with respect to the specific development are defined.

It is also during this time that the strategy and personnel relationships with all the necessary outside concerns in governmental units at all levels -- county, city, state or federal -- are initiated. The project is usually still not made generally public at this time because, typically, certain land parcels are still being negotiated for, and for other very obvious political reasons. On the other hand, it is wise to begin a relationship with various outside public or private interests and institutions to inform them of the planning about to commence on the project. Obviously, this is extremely necessary where the planning interests for the town, county, or state, are concerned. Many agencies must be consulted -- regional council of governments, regional planning bodies and local planning bodies, water quality boards, state roads commission, etc., -- in order to get their input into the project. Very often these public or private interests have great data resources which they will normally be glad to make available to the various consultants requiring this information. The disclosure of the project to outside individuals at this point must be carefully considered by the developer to avoid unforeseen problems when the entire project is finally made public. He must take into consideration all agencies and many individuals to insure not only the obtaining of accurate advice and data to be fed into planning, but also to build up a support base for the project.

At this time it is necessary to collect, record, assimilate and challenge all existing available data, maps, studies, plans, and reports, and augment this data when necessary by additional research. The sources for the existing data are many of the previously-mentioned public and private agencies and interests. This, of course, is very important, since it provides the base upon which all future work will be conducted. If a particular piece of data is found lacking during later stages, it can seriously impede the planning progress and set back certain aspects of the total plan until that particular piece of information is obtained. The information being sought during this stage is similar to the kind of data normally required for large-scale land planning assignments. However, the long-range nature of a new community will limit the amount of available data.

Site Analysis Phase 2. Here the urban designer goes through an intensive process by which he becomes intimately familiar with the physical determinants of the land. He will prepare studies pertaining to historical geology -- foundations and bedrock; hydrology -- soil drainage, surface water, ridge and drainage; physiography -- land features of region and site, slope study, topo interval; pedology -- study of effects on soil; climatology; vegetation type and association map; and wildlife zones map.

The validity of this analysis lies in its accuracy and totality of information. But, the important roles for the environmental studies lie beyond the initial stages of the analytic process. The most vital linkage to final implementation is the very delicate transferral of information from environmental evaluation to concept planning formulation. This is accomplished through a process of evaluating the many systems which comprise the total environmental range of an area, and consists basically of four areas. The first is the reconnaissance of all material which will be brought to bear as the actual analysis process. The second is the mapping of information, which leads into the third and most involved step -- the evaluation. This step combines, through a series of overlays, all areas of concern into a workable map which actually gives varying levels of environmental impact. The fourth and final step becomes one of continuing design input throughout the new communities process. This use, as design criteria, insures that the workings of the environmental systems of the area and site will be responded to with full comprehension.

2. ECONOMIC PROGRAMMING AND URBAN DESIGN

The constant and very close relationship between the working urban designer and the working urban economist is necessary during all phases of the physical planning activity. During the Inventory and Site Analysis Phase by the urban designer, the urban economist is involved in parallel activities consisting of the Reconnaissance of the region and a Market Study and Analysis.

The urban economist will closely analyze the region in terms of its people -- who they are, how fast they are growing, what supplies their economic base, where they are living, what kind of housing they are seeking -- as well as an overview that looks at the region's population, economic base, housing supply and demand.

He will analyze and look at total population growth in the region, population changes within the region, the shift to the suburbs, decrease in the rate of natural change, change by age group, migration, and analyze population projections.

In terms of the economic base, he will look at the historical development of the region, the existing levels of employment and unemployment, state of the region's economic health, family income in the region and by sub-areas, the employment and income outlook for the total region and sub-areas, and the resulting impact on family income. He will make summary projections of these facts and their implications for the site, even getting down to the potential attraction to the new community of a particular range of employment possibilities.

Based on the above material, he will specifically analyze the metropolitan sector in which the new community is to be located, assign to that sector a share of the region's growth, and then estimate the percentage of capture that the new community can absorb, taking into consideration access and competition of other areas within the local sector and the total region.

The urban economist will arrive at a preliminary market and a preliminary program for the new community in terms of its ability to capture a portion of the region's housing, industrial, retail/commercial growth and demands projected over a 10-20 year time period. He will project the housing pattern in terms of numbers of units, acres of land, density of housing, types of occupants, characteristics of housing, pricing, and so on. He will later detail this in terms of income, price or rent of unit, number of bedrooms, households by size, age of heads, number of children, number in labor force, and finally, mix of units by size and tenure. He will also begin to relate non-residential activities such as shopping, services, and offices, necessary to support the residential community.

The program is normally divided into phases consisting of three to five year increments, and on a year-by-year basis distributing all uses.

This first program from the urban economist is unrelated to the specific nature of the physical land. However, it does relate to the physical location of the site within the metropolitan area.

Concept Plans Phase 3 will take the preliminary program and test it on the land in a broad-brush fashion. Alternate sketch plans are produced in the form of color-coded density and building type land use plans, with acreage overlays to back-check the required acreage for each density use.

At about this point, certain conflicts and problems will surface. In our experience, the program for the first few years of development in the new community, typically on the suburban fringe of a metropolitan area, will call for a heavy acreage requirement for single-family detached units, with only a small acreage requirement for multi-family units. The reason for this is that the single-family detached unit becomes a traditional leader for other residential types because it is the traditional residential type attracted to a suburban location. The economist will argue that the attempt to attract a higher proportion of multi-family housing during the early years of development is an unnatural trend. The concept sketch plans will often show that in order to satisfy the acreage requirements for single-family detached units in the first few years of development, a wide acreage spread will be required. This will cause initial problems of over-extending the utility and road systems, and as a side issue will not project the kind of image that a new community should try to present in its opening years. Here is where the designer, economist, and developer must begin to arrive at the image of the opening day or first few years in terms of the marketing strategy of the new community. It is here where the developer must decide that he really means to create a new community image by establishing a critical mass in a given place in terms of a mixture of residential types and non-residential activities. Very often other factors, such as land ownership or political interests, will begin to come into play, revising the preliminary program for the community to respond to the image and marketing aspects.

As the program is tested on the land, it will be evident that the site analysis input, utility availability and sectors, and access to the land will have an effect on the alteration of the initial and long-range program and pace. For example, let us assume the first few years

of development are to be located in a particular part of the site because of its relative ease of access and provision of utilities. If that parcel contains a good amount of land better suited to townhouses than for single-family detached, a revision in the proportion between residential unit types is in order. If there is a special view or body of water to relate to and better suited for a higher density, a revision is in order. Let us assume that because of high access a future major non-residential use might be better located there, then the residential types related to the non-residential use of the site will vary significantly from the initial programmed mix.

In a recent project a significant amount of acreage was found to have soils and sub-surface conditions to make it difficult for building construction. This section of land, due to its ease of access and service by utilities, was part of the first development phase. The urban designer proposed that this unwooded, difficult site be improved as a golf course, surrounded by townhouses and cluster houses on better soil situations to be sold at a high price, taking advantage of the golf course open space and recreational amenities. This housing program, as projected by the urban designer, was in direct contrast to the more moderately priced single-family detached program for the first phase as programmed by the urban economist. The solution was to compromise by placing the required first-phase moderately priced, single-family detached program in another area that had been proposed for a higher density housing program at a later phase.

In another recent project, the urban economist recognized an exceedingly strong market for high-density, low-rise, multi-family programs. Unfortunately, the heavily wooded nature of the site, and the delicate soil and subsurface conditions of much of it, as well as the expressed goals of the developer for a "wooded character" caused the urban designer to recommend that the high density, low-rise program be reduced and part of the required units distributed into elevator units, thereby decreasing land coverage and permitting more openness of the site.

The urban economist will make assumptions for building types and densities based on experience in the existing metropolitan area's housing activities. The urban designer will review these building types and densities and often recommend revisions to take advantage of a particular physical feature or amenity, or to recommend the inclusion of a new housing type that might better suit a particular environment. The "creative tension" between the urban designer and the urban economist in these refinements of the program is the best assurance that the developer will have a marketable product both economically and sensitively placed on the land.

The urban economist, in his program, will recommend a certain amount of acreage for industrial land that the new community will be able to market during the development period, based on projections on economic growth and attraction in the area. The urban designer will seek sites in the community plan suitable for the various kinds of industries the urban economist has indicated could be attracted to the community -- sites for maximum highway exposure and access, sites for rail-served industries, and reasonably level land are major locational criteria. Often the amount of land suitable for industrial use is either much less

or much more than programmed by the urban economist, establishing a condition requiring careful consideration by the developer as to how important industrial land is to the overall economic feasibility of the project and how strongly he will market this land.

It is the responsibility of the urban designer, in altering the urban economist's program and pace, to attach assumptions backed by appropriate study and analysis before he arrives at alternative recommendations. At this point the designer, economist, and the developer (with his marketing hat) will carefully weigh the short-range and long-range development and marketing implications of these changes that have varied the best economic and marketing analysis input. Typically, it is at this point where the developer truly becomes a new town builder, in that he is beginning to commit to the kind of innovative and long-range thinking required in his position. He will be looking at the first few years of development, and will see that the environment he will be offering to the public should be different and better than that being typically offered in similar suburban situations. He will have to look at this initial marketing program as the beginning sample of the new community to come. He will begin to commit his resources to the provision of a high assortment of amenities related to his mix of residential types to help create his market.

Once the concept sketch plan has been approved by the developer, the final program is then carefully rewritten for preparation of a Preliminary Development Plan and Phasing, Phase 4. Here the concept of the community in terms of its structure relating to the circulation system, the open space pattern, location of community centers, residential land and industrial sites, is drawn in detail.

A series of detailed quantity take-offs in acres for each land use, and quantity take-offs for the circulation system and utility system, are related to development costs and preliminary phasing plans. This is input to the urban economist as data base for his first run of the economic model. The urban economist must depend on major engineering input for infrastructure systems development costs and land development costs, based on phasing by the urban economist and its distribution on the land by the urban designer. He takes this data and the programmed acres of land for all uses to be sold and developed in each year by phase over the development life of the project, and the development costs required to open that land for development are fed into the economic model to test the feasibility of the project. This is the moment of truth, and it becomes a time of great anxiety for the entire planning team. The results of this run will often cause a reexamination of parts of the plan or some of the approaches to phasing the project. It is here where the urban designer and urban economist truly earn their keep in creating a development plan on a year-by-year phase related to a year-by-year cash flow and marketing program. Usually during these work sessions questions such as the relative ease or difficulty of marketing a particular land use related to a special amenity such as view or water frontage will be discussed. The urban economist might argue that the particular land use would be difficult to market in the quantity assigned to it in the period allowed, and the planner would argue that the unusual quality of the site and its relationship to the total promise of a new community will create its own market. These are often very spirited discussions that must be moderated and resolved by a wise developer.

In terms of the details of a new community programming process, such as the square foot-ages assigned to commercial service centers, the urban designer will work closely with the urban economist and urban social scientist in the programming of each community center related to the residential mix and income mix of each sector of the proposed community. It is in the game of balancing the market required for the support of commercial services related to the population required for related services such as schools, recreation or religious facilities, that the urban designer, urban social scientist and urban economist must be at their creative best. More on this follows in Social Programming and Urban Design.

Final Development Plan and Phasing, Phase 5. To a great extent, this final task is a detailed refinement of the previous phase. It is here where the total planning team becomes "committed" to the development plan and phasing for the new community.

We are reconsidering the amount of detail required, and in fact possible, for developing plans for a new community to be built over a 10 to 20 year period. We are presently struggling with opposing requirements. On the one hand, the engineers must have a total *detailed plan upon which they base phased development costs required by the urban economist*. On the other hand is the urban designer's and urban social scientist's knowledge that it is difficult to totally plan the development of a community to be built over a 10 to 20 year period. Both the urban designer and urban social scientist recognize that advances in technologies and rapid changes in life styles will greatly affect the future development of any community, especially a new community which is expected to respond to such changing conditions and attitudes. At the end of this paper I have addressed myself to "future directions", in an attempt to put these concerns into perspective.

3. SOCIAL PROGRAMMING AND URBAN DESIGN

Experience in social planning and programming as input to urban design for new communities is rare, and even when statements are made that a particular new community had "social planning input," the referred-to input is more likely well-meaning lip service on the part of the physical planners. Those trained as social scientists, with few exceptions, have had no experience and little interest in the required input for the programming of a new community. Because of this, there does not exist today research material or methodology that the few social scientists interested in this field can look to or rely upon. In recent years the only attempt by a new community developer to bring social scientists into the planning for a new community in a meaningful way was The Rouse Company in the planning for Columbia, Maryland. In 1963 the physical planners, the developer, several social scientists and members from other disciplines formed a work group and met for several days each month, over a period of six months, to ask questions, discuss problems and opportunities, and generally to engage in stimulating forward-looking dialog as a general guide for the programming and planning of Columbia. Most of those involved in the work group process would say today that it contributed a great deal to the program and plan of Columbia. Unfortunately, once the work group's job was finished and the final plans and then construction of Columbia began, and even today with some 15,000 people living in Columbia, there is no formal feed-back process to use Columbia as a "laboratory for the social scientists."

Recently, several outsiders have studied Columbia, Reston, and other planned communities in an attempt to provide a base for further study.* These studies are only a bare beginning. Much more experience and work is required if social scientists and the new community programmer are to be effective.

My office has been involved with the social planning and programming of three new communities recently, in which the developer/client has been progressive enough in his thinking to include social programming for the new community on an equal footing with the economic program and urban design. The work in social programming for these new community projects is carried out by a team consisting of individuals trained in the social and political sciences, urban planners with a particular leaning toward community programming, and social/politically oriented representatives from the client's in-house staff located on site. The process and methodology described here is in its infancy, and is being revised on a daily basis, even as you read this paper.

For clarity and simplicity, I will describe the interaction between the urban social scientist and the urban designer in the same manner as the interaction between the urban economist and urban designer was discussed previously; that is, describing each phase of work and the resulting interrelationships between the disciplines.

Social/Political Data Survey, Phase 1. Here the social scientist, through basic field research work, describes the status of existing social service systems in functional areas. He identifies existing programs, policies, and plans qualitatively and quantitatively relating to the following community services: health, communications/information, education, culture/entertainment, recreation, religion, law enforcement and public safety. The physical location and delivery system of the existing facilities are mapped in relationship to the proposed site for the new community. Normally this covers an area as large as a county or sub-region, with highly specialized service systems delivered in the urban core. Short memos are produced describing the state of the existing and proposed facilities and how they might relate to the proposed new community. During this phase of work, valuable initial contacts are made with personnel in the various institutions delivering the required social services to the area in which the new community will be developed.

Data Evaluation, Phase 2. During this phase, the existing facilities and the proposed plans for the expansion of these facilities are carefully related to the phasing of the new community and the needed services among the full range of new community residents in terms of social/economic profiles. Large new communities are located in predominantly rural portions of metropolitan areas, normally within a county structure, or a low population incorporated town in which social service systems are either non-existent or at a bare minimum. At the same time, the delivery of highly specialized services, such as medical

* Planned Residential Environments, Institute for Social Research. University of Michigan, Ann Arbor, Michigan.

centers, are available through the urban core. Here the planning team realizes the degree to which the developer and the local governmental body in which the new community is located must begin to plan for the delivery of required social service systems to the residents of the new community, by attracting regional institutions, expanding existing ones, or creating needed new ones. Here, too, certain hints as to innovative service system possibilities make themselves apparent.

For example, if the existing education system in the area demonstrates a flexible approach to education, then there are distinct possibilities that the new community, through its efforts, may propose an advanced innovative system for delivering education. Or if the urban core has a major medical institution and school, then the creation of an innovative system for delivering health care to the future new community's residents becomes possible.

As a working tool, a matrix of social service systems is created, and the existing conditions and proposals for expansion are noted as a base upon which the social service requirements for the new community are added.

Concept Design of Social Systems, Phase 3. Based on the existing situation and the projected requirements for the new community, a set of planning goals and desired objectives are projected as a general guide for the structuring of the community. These goals are based on a number of considerations, such as the socio-economic breakdown of the projected residents for the new community as identified by the urban economist, the general life style of the people in the metropolitan area in which the new community is to be developed, and the physical nature of the site.

A part of this study, for example, concerns itself with the special needs of certain groups, such as the handicapped, children, teens, senior citizens, women, ethnic/minorities, in terms of programs, expectations, attitudes, and facilities. We have found, for example, that the great majority of these "special needs" at this particular point in time seems to be universal, while in certain parts of the country in which we have found ourselves working, a variety of factors come into play, such as attitudes toward race and ethnic/minorities, and discernible variations in life style in terms of recreation, attitudes toward mobility and transportation, and values placed on cultural activities.

A social service system concept is sketched out, identifying basic services required in terms of type of service, level and style, and scale of operations, and possible and desirable configurations of service systems are identified in terms of administration, operations, required facilities and, most important, linkages to other service systems. These variables are set in the form of a group of matrix studies, to be used as a tool for the refinement of the basic concept for the specific new community.

During this phase, the urban social scientist will work closely with the urban designer in attempting to understand the possibilities of the site, as well as the development of flow diagrams and charts illustrating many complex interrelationships. These visual systems

are used not only for notational and design purposes, but to communicate to the client and outside consultants the concepts under consideration. We have found through experience that people respond more creatively to a visually projected social concept. Sketches and diagrams are typically prepared illustrating the diagrammatic relationship between, for example, the total educational system and other community facilities such as recreation or health. Diagrams are generated attempting to structure the various elements of the new community in terms of residential areas, neighborhoods, villages, levels of open space systems, or whatever the organization of the site characteristics and goals might suggest.

At this point, the urban social scientist recommends to the urban designer certain broad requirements in order to begin to satisfy the requirements of the community. For example, if initial conversations with the existing school administration indicate that an innovative educational system is possible for the new community, by way of delivering education through a highly flexible approach, then the urban designer is less constrained in the way he approaches the traditional relationship between residential areas and school facilities.

In one case, the urban social scientist identified a need within a county for a regional recreational system, and recommended that land be set aside within the new community plan for a regional park. This began to suggest a whole series of possible interrelationships between a county regional park within the new community and the other facilities and activities that the developer would provide.

Certain elements of the urban designer's site analysis and sketch concept plans may inspire a sensitive urban social scientist in an innovative way. For example, in a recent project the existence of a highly desirable ecological preserve within the new community began a chain of events in which the educational system would build curricula related to this unique area. In another case, the opportunity of using an existing rail system suggested possibilities for commuter passenger transit to the urban core, and in turn inspired an approach whereby the new community's educational system would use the commuter train during off hours as a classroom-on-wheels, taking students to the educational and institutional facilities in the urban core on field trips, using an expensive commuter transit facility to its capacity, and serving purposes beyond its original intention.

During the concept design of social systems, the developer and the various heads of the diverse institutions are involved in the drafting of outline programs and proposals. Where a significant number of residents live within the influence of the proposed new community, their guidance is sought in an attempt to test various proposals and to surface or project additional needs.

Preliminary Social Service System and Community Organization, Phase 4. During this phase, broad concepts and approaches are structured and quantified in terms of a physical program, defining and describing in detail all of the required systems and related criteria to serve the new community.

For example, the projected educational system is detailed in terms of number of schools needed at each level, range of number of students per school, size of schools, range of required acres per school, and suggested physical relationships between the schools and other community services and facilities. A program of the community recreation system is proposed, and its effect on required amenity packages in community centers in terms of recreational facilities and the like, is detailed, providing input to the urban designer for their location at the various levels required.

We have found it useful for the urban social scientist to "live" in the new community on paper through the technique of writing a series of vignettes describing, and thereby testing, the projected life style of various socio/economic and special groups projected to live in the new community. These vignettes, or life-style stories, constitute a verbal description of the new community, just as the urban designer describes the projected new community in terms of plans and sketches. We have found it useful to illustrate, through very loose sketch techniques, these vignette experiences for the projected new community.

Final Social Service System and Community Organization, Phase 5. During this phase, the preliminary work outlined previously is refined. Most important is the setting up of professional specialist advisory work groups on site for the continuing programming and planning for the new community's social service system. Detailed proposals for the creation of programs relating directly to the physical design and phased development of facilities are projected during this time period.

Programs are prepared for all of the varied community service centers, and the detailed linkages between the various facilities are clearly identified. Facility square footage and cost implications are estimated, providing input to the urban economist for the new community's economic model. This is a most difficult task, because a complex collection of interrelated community services, linked together in an innovative way, must be described in terms of capital and administrative costs. An attempt is made to demonstrate the cost savings implicit in the structuring of overlapping multi-use facilities, serving many activity requirements.

In order to keep this complex set of relationships in a workable form, we have prepared a series of matrix charts relating all of the community's facilities to facilities, facilities to activities, activities to needs, facilities to dimensions, and activities to dimensions. The process is a most difficult one by hand, and so far we have not attempted computerized application. One product of this process is a scaled relational diagram of facilities that allows sketch schematics to be drawn for community centers and other related facilities. We see this tool as important an input to the new community developer over a long period as the urban design plan or economic model created for the same development.

FUTURE DIRECTIONS

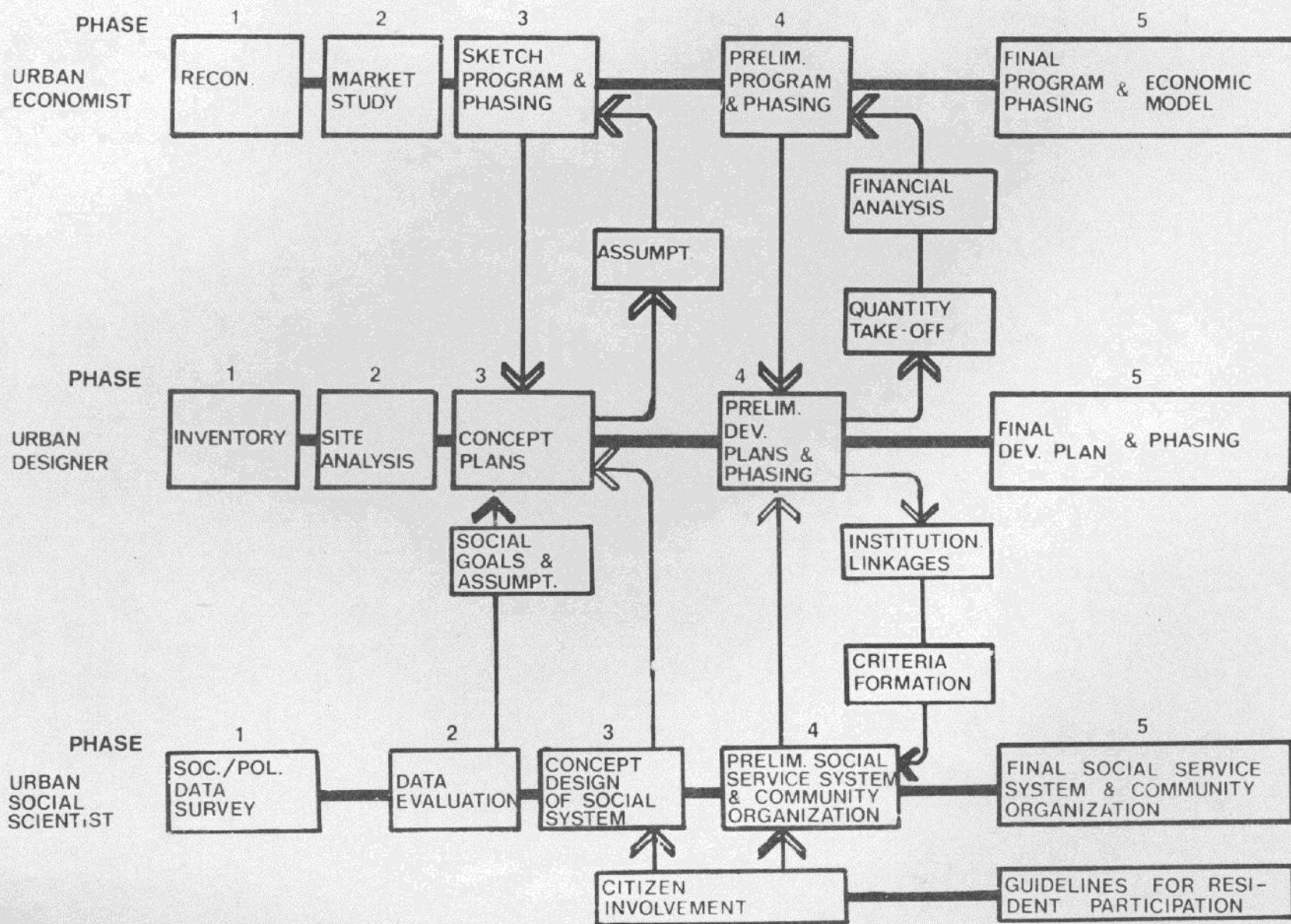
The above paper has concerned itself with the state of the art by a team of urban economists, urban social scientists and urban designers that have worked together on new community projects. There is no doubt in any of our minds that the state of the art as described above is in its infancy, undergoing constant change and refinement in an attempt to respond to the enormous responsibility of providing a development program and plan for a new community over a long-term development period. The key to the refinement of the state of the art will be the way in which the development plan for a new community will be able to respond to the changes in technology and life styles and attitudes that will occur during and beyond the development period.

At present we are responding to this challenge -- that is, planning for a changing condition -- by avoiding the "master plan approach." Except for a reasonably detailed development plan for the initial three to five years or so, it would be difficult to project anything beyond a general structure and a set of tools for the programming, planning and development beyond the initial phase. The total development for the community, during the long term, will be based on a structure of elements that have a certain permanency about them. These elements are the open-space system, infrastructure, including circulation, utilities and general locations for service centers. Between this structure of natural and proposed man-made features, are the areas that will respond to the future changing conditions that will affect the development. In order to provide the initial development phase, and the future development years, with a tool through which the community services and facilities will be offered, a very complex set of matrix charts have been prepared. Thus, during any period of time, the relationship between a particular market profile of an up-coming development period and activities/facilities can be input to the matrix to arrive at an output of requirements to satisfy the proposed residential community. In addition, the matrix format is so structured that it can become one of the tools allowing for feed-back that the residents of the community and the developer can employ to their mutual benefit toward arriving at future needed services and facilities

We must leave the community developer with more than a development plan. He also needs a development process responsive to the community concept. What we are seeking is a workable technique by which we can marry all the natural and man-made community structures with a system for the continuous programming, allowing for constant feed-back, of community services and facilities, and the continuous responsive up-dating of market input data to an economic model that recognizes the dynamic nature of the new community development process.*

* Staff whose work has contributed to this process is acknowledged: David Carroll, Ecological Planner, John Matthias, Urban Planner, Guy Hager, Social Planner, Henry Fostel, Urban Designer.

*What ever
happened to Barry?*



NEW COMMUNITY PROGRAMMING AND PLANNING PROCESS