Abtract

Comprehensive planning, defined as the work of those who engage in efforts, within a delimited geographic area, to identify and order the physical, social, and economic relationships of that area, is discussed in the four sections of this paper. Section I, Introduction, describes what "planning" and "comprehensive planning" are. In Section II, Why Plan, the following subjects are discussed: A. Proficiency Concepts and the Historic Image of Rural America; B. Interrelated Systems. Section III, A Planning Process, briefly outlines a planning process, which is made up of purpose, assessment, assumptions, concerns, goals, objectives, action planning, implementation, and evaluation. In the final Section IV, Elements of a Comprehensive Plan, an outline is provided of the elements, i.e., the base map; economic base, population, and land use studies; future land use plan; major street plan; zoning ordinance; parks and recreation; schools; other public facilities and public buildings; utility services and related facilities; housing; and capital improvement programming. (DB)
A. What is Planning?

Webster's New World Dictionary defines "planning" this way -- "to devise a scheme for doing, making, or arranging." Planning is a process all of us engage in all the time. Farmers devise schemes for rotating crops, breeding livestock, and depreciating equipment. Businessmen devise schemes for ordering seasonal merchandise, reducing inventories at the close of their fiscal year, and saving for business expansion in anticipation of future growth. Housewives have schemes by which they spend grocery money, prepare meals, and maintain their homes. Students determine their career choices, select elective courses in school, and choose to participate in particular extra-curricular activities.

As we plan, we are doing two things. First, we are giving to ourselves an accurate formulation of our own desires; we either write down or make a mental note of our specific wants. Secondly, we are accurately measuring the limits and the opportunities that have been imposed and bequeathed on us by our environment. For example, I may want to live in a $100,000 ranch-style home with a swimming pool and spend my leisure time on a 40-foot boat on a large, scenic eastern South Dakota lake. However, my environment has only bequeathed to me a salary of $8,000 per year in an area which requires that I work six days a week and which has no large lakes. Therefore, my environment has imposed on me a $12,000 home without a pool, very little leisure time, no boat, and no large lake. If my plan for my life is to be effective, it must realistically correspond to who I am, what I can do, and where I live.

The function of planning is to make actual and evident that which is only potential and presently inevident. Suppose the three children of the family come to mom and announce that they are tired of hamburger, chicken, and casseroles. They would like steak once, just for a treat. The potential exists for mom to adjust her food budget to allow for steak. It is, however, presently not evident to mom just how to make that budget adjustment. On looking at her budget, she determines that if she postpones for two weeks a dinner party she is planning, then it is possible for her to give her family steak next Monday night. What has happened is that the kids have accurately stated their desires. Mom has accurately measured the limits and opportunities built into her budget. By planning her meals and dinner party she will be able to actually provide the family with steak next Monday.

The planning process takes place in the present. Planning measures the facts of the past and attempts to orderly create the future. Using the example of the mother and her food budget, the following chart can be drawn.

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PAST ACTIVITIES

1) Mr & Mrs got married and had 3 children

2) Mr got a steady job which allows Mrs $165/mo for groceries

3) Mr & Mrs made some friends who had them over for dinner

4) The children requested steak

PRESENT ACTIVITIES

1) Mom sits with her budget

2) She decides to postpone the party she owes her friends

FUTURE ACTIVITIES

1) Family will eat steak next Monday

2) The dinner party will be held in two weeks

The planning process is the same for nations, states, counties, and communities as it is for individuals and families. The only difference is in the degree of complexity of the social unit for which the planning is being done. A community or larger geographic area (i.e., a multi-county, sub-state region) is significantly more complex than an individual or a family. This increased complexity is due in part simply to the larger number of people incorporated into a larger social unit. A plan for a town, county, sub-state region, state, or nation must be arrived at collectively. That is, it cannot be an effective plan if only one person or a small group of people plan for the larger social unit. An effective plan which is collectively determined is one which is derived from the people in the planning area and which is characteristic of those individuals acting together in unity. We see this collective nature of planning at work in our families. We do not effectively plan vacations, improvements to our homes, purchases of cars or major appliances without consulting all members of the family. Each family member has a direct, vested interest in how we use the resources that have been bequeathed to us by our environment. Likewise, each resident of a community or state has a direct vested interest in how the resources of their area will be used.

B. What is Comprehensive Planning?

"Comprehensive planning" can be defined as the work of those who engage in efforts, within a delimited geographic area, to identify and order the physical, social, and economic relationships of that area. Comprehensive planning, then, deals with a specific geographic area and with all aspects of life that have existed, do exist, and hopefully will exist in that area. We can diagram comprehensive planning as follows:
This cube outlines three dimensions of comprehensive planning. Face number one of the cube lists the steps of a planning process which will be described in Section III of this paper.

Face number two names the social units in which we as individuals function. We will call these "functional levels" of our society. These levels increase in their respective degree of complexity as they are read from bottom to top. Each of us functions as an individual (the least complex functional level) and we are all part of a family. We also spend time in small, peer groups: our farm organization, chamber of commerce, service club, women's auxiliary, high school biology club, football team, etc. We function in our neighborhood. If we farm, our neighborhood would consist of the nearby families with whom we associate. In a town our neighborhood might be our block or "our end of town." We are all residents of a city, town, or township and we function in various capacities on behalf of one of these larger geographic areas. We also function as residents of our county. Presently we are becoming increasingly aware of our involvement in multi-county areas. This new awareness is signaled by terms such as "model rural development," "regionalism," "regional planning," "sub-state regions," "multi-jurisdictional planning regions," "regional approach," and "functional area." Lastly, we are residents of a state. Face number two of the cube presupposes that a comprehensive plan for any functional level must consist of a collection of the comprehensive plans from the preceding levels. For example, our family's comprehensive plan should be representative of the individual plans of each family member. The family's plan should be characteristic of the individual family members acting together in unity. Likewise, an area's comprehensive plan should grow collectively out of the individual county plans of those counties included in that area. Those county plans, in turn, grow out of the comprehensive plans of the cities, towns, and townships in that county. This progression proceeds all the way back down the functional levels to the individuals' plans which should be incorporated into the area plan. Theoretically, it
is this inductive, grassroots-oriented planning process which will insure creation of the most effective and efficient comprehensive plans. How this is accomplished practically is material for another discussion which would deal with the social organization process and citizens planning efforts.

Face number three of the cube deals with the social systems that operate in each of the functional levels. These social systems are described in Section II-B of this paper.

II. Why Plan

A. Proficiency Concepts and the Historic Image of Rural America

Our nation, including in particular rural America, seems to be engaged in an exercise we might call "soul searching." One dimension of this exercise is the realistic evaluation of the limits and opportunities that our environment gives to us. Farmers have long understood this idea. They know the opportunities for yields per acre; they also know the yield limitations determined by a collection of factors. They know their pastures or grazing lands provide opportunities for feeding a certain number of livestock; they also know they are limited and cannot exceed that number. We daily hear broadcasts and discussions about limits and opportunities. Can the United States afford the opportunity to provide large foreign aid grants or is our nation limited because of the excessive number of poor and starving who are American citizens? Can we afford direct military involvement in Southeast Asia when our domestic needs seem so great? Can rural America afford quality public services when the outmigration of people is forcing a greater tax burden on those who remain in order to provide those services? Can rural America consider attracting industry to its towns when town folk have not yet assisted their farming neighbors in dealing with the farm income problem? Can rural America continue to provide quality education for its children when so many graduates move to urban areas? Can rural America seriously consider attracting new residents when we are becoming aware that clean air, clean water, and open spaces are scarce items? All of these questions deal with our limitations and opportunities in accordance with the resources that we have available. Planning is the tool we have for answering these questions.

As stated earlier, planning deals with accurately measuring the limits and opportunities imposed and bequeathed on us by our environment. It was also stated earlier that the other thing involved in planning is an accurate statement of our desires. Our statements of our desires are determined by our attitudes and values. The person desiring a 40-foot boat is telling us that he values large boats, large lakes, and leisure time. He apparently holds an attitude about life that has been expressed in the adage, "All work and no play makes Jack a dull boy."

John M. Brewster, a former USDA economist, describes in an essay two values he feels are highly regarded by Americans and which grow out of the rural heritage of our nation. His essay is entitled, "What Kind of Social and Economic Order Do We Want in the Plains?". The two values he describes are: (1) proficiency concepts of personality and society, and (2) the historic image of rural America.

We value proficient individuals. That is, we expect people to be highly competent and skilled in whatever they do. As a society we care little about
what an individual chooses for a career, but we care a lot about how he does his job. We expect that his work will contribute to the general welfare of the community, but more importantly we expect that his employment will give him an opportunity for developing his own potential as fully as possible—to become as proficient as possible. It is this value which has contributed to America's leadership in the world of the industrial and technological revolution. Machines and technological knowledge are extensions of man which make him more proficient. The American farmer has become so proficient through the use of sophisticated equipment and management techniques that he can easily farm a section or more. The result of this increased proficiency is the emergence of a new land settlement pattern in America in which the number of family farms is decreasing while the size of the remaining family farms is increasing. Businessmen can now operate larger businesses which offer consumers lower prices and better service. Businessmen too have become more proficient. To a large extent housewives have been liberated from housework because modern appliances have made them more proficient homemakers.

This drive for increased proficiency is evidenced by the kind of people we in America choose for our heroes. We tend to emulate, respect, and hold in high esteem the person who is an innovator. Thomas Edison and Henry Ford are great Americans because of their contributions to increased individual proficiency. As school children we marveled more at Cyrus McCormick's ability to invent a reaper than we did at General George Patton's ability to lead the U.S. 7th Army into Sicily. Inside of ourselves, most of us still carry the American dream of one day being able to invent some gadget that will make people's work easier.

Our proficiency concept includes a concept of a proficient society. We expect our society to provide us with the means (e.g. public schools) necessary for developing our potential to the fullest possible extent. We also expect that our society will offer all Americans opportunities for productive roles that are in keeping with their abilities. When these opportunities are not present, we make unemployment and underemployment political campaign issues. And we further expect that our society will give an individual a fair return for his contribution. When a fair return is not forthcoming, we organize into unions or we lobby for government subsidies.

Along with our proficiency concepts we value an historic image of rural America. This image consists of a farm component which values a network of small family farms. Our image also consists of a community component which values a network of independent, small towns and another network of related institutions such as schools, churches, and local government.

Brewster maintains that these two values, proficiency and our historic image, are currently in tension. Do we want proficient farmers or do we want a network of small family farms? Can we somehow compromise and keep some semblance of both? Do we want small, independent communities with small business establishments or do we want larger, more proficient communities and businesses? Do we want small, independent school systems or do we want large, more proficient schools that provide more of the means necessary for students to develop to their fullest potential? Do we want small churches that struggle just to pay the utilities and the pastor's salary or do we want more proficient churches that have monies for effective ministries of education, music, youth, etc.? These are the questions we face. How we answer these questions depends on how we decide to balance our values of proficiency and historic image.
One reason, then, for planning is because resources are not unlimited. We need to realistically examine the limits and opportunities inherent in our available resources. And we also need to adequately formulate our desires. This means that part of the planning process must include an evaluation of our values which inform our desires.

B. **Interrelated Systems**

A possible way of viewing a town is to see it as a collection of business establishments, service facilities, and private residences, all joined together by the city sewer system. In similar fashion, a farming area could be viewed as fields, pastures, outbuildings, and homes, all connected by section roads. These are static rather than dynamic definitions, but they do point to the interrelatedness that exists in our towns or farm areas.

Whatever geographic area we call "home" or our "community" can be defined as a dynamic, complex organism that is alive; it has a pulse and a thrust. Its pulse and thrust are unique to itself and we feel them and experience them. We know this is true because its always "good to be home" and the place from which we just returned is always just "a nice place to visit, but not good to live in." We are part of our community, it is part of us, we are alive together, and all aspects of our community are interrelated and interconnected. Everything in our community is evolving; it is in the process of becoming something else. It is moving with time into the future whether we choose to responsibly plan for that future or not to plan.

Comprehensive planning is the business of attempting to orderly create the future of that living, diverse, virtually indefinable geographic area we call "community." One presupposition of the sub-state, multi-county planning efforts is that "community" in rural America today is a geographic area larger than our farm boundaries, city limits, and even our county lines. In other words, the geographic area which contains all the interrelated and interconnected components that we utilize in order to survive, now covers several counties.

In order to plan we need to describe our desires and our environment. In order to describe our fluid, evolving, unique "community" it is helpful to see that organism as being composed of interrelated systems. F. Kenneth Berrien, in his book, General and Social Systems, defines a "system" as follows: "A set of components interacting with each other and a boundary which possesses the property of filtering both the kind and rate of flow of inputs and outputs to and from the system." A system produces something; it receives input and transforms that input into output. A system has boundaries. That is, a system does only what it is designed to do.

On face number three of the comprehensive planning cube, eight social systems are listed. A look at the transportation system will hopefully clarify Berrien's definition of a system. The transportation system has components; e.g., section roads, city streets, interstate highways, railroads, rivers, trucks, cars, buses, planes, boats, trains, truck terminals, bus depots, airports, barge terminals, train stations. It also has physical boundaries in the sense that trucks, buses, cars, planes, trains, and boats seldom, if ever, move across corn fields or front yards. The transportation system also has functional boundaries. We do not expect this system to educate children, give us today's news, cure our cold, or
care for our spiritual lives. This system receives input and produces output. It receives goods, services, and people and moves them to a new location. All the components of the system are interrelated. A package that we mail may, before it is delivered, be carried by a boat or plane, train, truck, bus, and car.

Any transportation plan to be effective must be comprehensive in the sense that it must deal with all the components of the system. This is necessary because of the interrelatedness of those components. It does little good to devise a scheme to increase the future proficiency of truck mail delivery if the highways are in poor condition and if proficiency isn't simultaneously improved in train, air, bus, and sea mail service.

We also need to observe that from the standpoint of systems theory, the 'aliveness' of our 'community' is due to the fact that all eight social systems listed on the cube are interrelated and mutually-interdependent. So there are two areas of interrelation with systems. There is the area of interrelation between components of a particular system. And there is the area of interrelation between systems. The chart below gives a few examples of how the transportation system interacts with the other seven systems.

<table>
<thead>
<tr>
<th>OTHER SYSTEMS</th>
<th>INCIDENTS OF INTERACTION WITH TRANSPORTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>1) Trucks bring newspapers to paperboys</td>
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<tr>
<td></td>
<td>2) Trucks bring telephone repair men</td>
</tr>
<tr>
<td>Religious</td>
<td>1) Cars bring people to church</td>
</tr>
<tr>
<td></td>
<td>2) Cars get pastors to members' homes</td>
</tr>
<tr>
<td>Welfare</td>
<td>1) Highways make vacations possible</td>
</tr>
<tr>
<td></td>
<td>2) Cars are the means for viewing outdoor movies</td>
</tr>
<tr>
<td>Health</td>
<td>1) Ambulances on highways save lives of injured people</td>
</tr>
<tr>
<td></td>
<td>2) Air transports speed aid to injured soldiers</td>
</tr>
<tr>
<td>Education</td>
<td>1) Children are bussed to school</td>
</tr>
<tr>
<td></td>
<td>2) Textbooks are trucked to the school</td>
</tr>
<tr>
<td>Political</td>
<td>1) President Nixon met with Chinese and Russians</td>
</tr>
<tr>
<td></td>
<td>2) Senators and Congressmen return home for weekends</td>
</tr>
<tr>
<td>Economic</td>
<td>1) Grain is shipped overseas</td>
</tr>
<tr>
<td></td>
<td>2) Livestock is trucked to higher markets</td>
</tr>
</tbody>
</table>

An additional example may be helpful in pointing out this area of interrelatedness between systems. One implement dealer whose sales and service area covers three counties orders ten seven-bottom plows and ten eight-row planters. He sells all twenty pieces of equipment to twenty different farmers in the three counties. Each piece of equipment increases each farmer's proficiency so that he can now farm an additional quarter section. If we assume that in the three-county area the average farm size is a half section, then the twenty farmers will, in purchasing or renting additional land, take over ten existing farms. This will displace ten farm families. From this point in time numerous, complex interactions between systems will occur. The displaced families will represent a loss in receipts to area merchants which will mean reduced wages, reduced consumption, and reduced inventories which will lessen tax receipts. This loss in tax receipts will affect operating revenue of local government and local schools. If any of the displaced farmers need job training this will increase the need for educational services which have just realized a reduction in revenue. If any of the displaced families are forced to become public assistance recipients this will require additional tax revenues. A reduced income for the displaced
families will mean less purchase of medical services which may affect their personal well-being as well as result in reduced income for persons working in the health profession. Local churches will realize a drop in membership and in offerings. Less tax revenues will be available for the roads in the three-county area. It is possible to go on and on with the implications of the twenty decisions to buy new farm equipment.

The point is that comprehensive planning is necessitated by the dynamic, interrelated nature of "community." In the example above a three-county "community" was in existence since this is the geographic area that was directly affected by the decisions of the twenty farmers. This "community" was in part determined by the service area of the implement dealer who could service this large area because of his relatively high degree of proficiency. To plan for a meaningful future means that we must first accurately state our desires, one of which is the degree of increased proficiency we want. We must also measure the real nature of our environment. Our environment is alive with the fluid, interaction of the social systems that support our existence.

It seems clear that our time of national "soul searching" and the very nature of the interrelated systems which make up our environment, necessitate comprehensive planning. In terms of what has been said so far, we can further define "comprehensive planning" as the needed activity of simultaneously applying a planning process to all components of all social systems in all functional levels of society so that an orderly, life-sustaining future might be created.

III. A Planning Process

A. Introduction

This section of the paper briefly outlines a planning process. Numerous processes are available and being used. This particular one is offered merely as an example. Planning is a disciplined, continuous, and cyclical process that we use for making decisions. Face number one of the comprehensive planning cube outlines the planning process. The cube gives the impression that planning is a linear, rather than cyclical function. The process is better diagramed below.
B. **Purpose**

It is assumed that before the planning steps are begun a purpose has been established. Whether planning for a functional level, or system component, or an entire system, it is necessary that the purpose be stated. The entity for which a plan is being made must have a function; a reason for existence.

C. **Assessment**

We begin the planning process by taking stock of the situation in which the entity exists for which we are planning. We need to know what has happened and what is presently happening in our environment.

D. **Assumptions**

Our second step is to consider assumptions we have about the future. Given how things have been and are going, what can we expect in the future? We also need to get the personal assumptions out in the open which the individuals hold who are planning with us. In other words, we need an accurate accounting of individuals' desires.

E. **Concerns**

Thirdly, we need to define areas of concern. For functional levels of society areas of concern are defined by the people and geographic areas involved in each level. For components of systems and entire systems we need to define the physical and functional boundaries of those components and systems.

F. **Goals**

Next a goal or goals should be set for the entity for which we are planning. A goal is a desired end-state which reflects the purpose of the entity and is related to a major area of concern. Goals should be realistic and attainable, but broad enough to encompass specific objectives.

G. **Objectives**

An objective is a short-term step toward attaining a goal. An objective is measurable, concrete, realistic, action-oriented, and it is put on a timetable.

H. **Action Planning**

Action planning is the development of a specific plan which details the personnel, budget, timetable, and other resources needed to realize the objectives.

I. **Implementation**

This is the action phase in which the completed plan is carried out.
J. Evaluation

It is false to assume that evaluation is only the last step in the process. It is the last step, but it is also a function that takes place at every stage of the planning process. Evaluation must be based upon agreed criteria and the evaluation results must constantly be fed back into the process.

IV. Elements of a Comprehensive Plan

A. Introduction

The term "comprehensive plan" has a technical definition which outlines the format of the plan. The term is almost exclusively used for plans relating to the functional levels of city, town, township, and above. Briefly outlined below are the elements of a comprehensive plan. Further elaboration of this outline is available in a booklet entitled Planning Primer, which can be obtained from

Northern Natural Gas Company
Area Development Department
2223 Dodge Street
Omaha, Nebraska 68102

B. The Base Map

This map should cover the entire area of the planning jurisdiction.

C. Economic Base, Population, and Land Use Studies

1) The Economic Base Study inventories the economic resources which the planning jurisdiction utilize to make its living.
2) The Population Study inventories the human resources.
3) The Land Use Study graphically inventories the existing use of every parcel and lot of land within the planning jurisdiction.

D. Future Land Use Plan

This is usually the first step in the actual preparation of a comprehensive plan.

E. Major Street Plan

This plan sets out the alignment and desired street right-of-way widths for future use for local, collector, and major streets.

F. Zoning Ordinance

1) The district map.
2) A written text.
G. Parks and Recreation

1) Ornamental parks.
2) Neighborhood play lots.
3) Neighborhood park--playground.
4) Community park.
5) Special area; i.e., golf course.
6) Major regional or district park.

H. Schools

1) Desired size of school unit in terms of enrollment.
2) Maximum travel distance for pupils.
3) Site requirements for building and playground purposes.
4) Probable affect of school location on the surrounding area.

I. Other Public Facilities and Public Buildings

1) Facilities and buildings designed to serve the entire jurisdiction's population.
2) Facilities and buildings designed to serve only a portion of the jurisdiction.

J. Utility Services and Related Facilities

1) Water supply and distribution.
2) Sewerage and sewage treatment.
3) Gas
4) Electricity
5) Telephone
6) Refuse collection and disposal.

K. Housing

1) Recognition of housing and housing related problems.
2) Identification of the obstacles to the solution of those problems.
3) Formulation of annual objectives related to the identified problems.
4) Identification of the planning activities to be undertaken over the next three to five years.
5) The implementation actions to be taken annually over that period.

L. Capital Improvement Programming

A long-term budget, separate from the annual operating budget, which projects capital improvement for the next five to six years.