

Central Mortgage and Housing Corporation; a few months from now we should be able to find out what schemes in Canada are going forward with statutory force.

This much appears certain: public acceptance of the necessity of planning will grow as we foot the mounting bills of non-planning. Planning achievement will be limited by the ability of those in the relevant disciplines jointly to match the public acceptance of the planning *idea* with soundly-conceived and precisely-defined planning *procedures*. The time for sound and precise work may be inadequate, for (with all defer-

ence to others in this symposium) our experts on planning in Canada are far from agreement. Inter-professional discussions on planning are still rare.

The hope of the Community Planning Association of Canada (and of similar societies in other countries) is to keep specialists and non-specialists, and those charged by the community with direct responsibility for its government, in touch with each other while they work toward the common goal: the building of the environment in harmony with the knowledge and desires of lay citizen, administrator and expert alike.

## Objectives of Community Planning

By S. A. GITTERMAN,

THE difficulties in which our cities find themselves today are well known. Most of them have become large sprawling centres with little differentiation in street pattern between the suburbs and the urban core. The individual has become lost in their vastness. There are few open spaces for recreation, light or air; and to reach such spaces it is necessary to traverse congested roads and highways. Great distances are covered in travelling to and from places of work. Generally, there are too many streets and they do not separate the various types of traffic. High service and maintenance costs and untold traffic hazards are the result. The physical pattern of today's city is not organized to harmonize with the social patterns of twentieth century living.

Is it possible to relieve most of these difficulties and rearrange the physical pattern of our cities to provide, in an economical manner for the social requirements of the individual as well as the group of urban dwellers? In the past,

efforts have been made to solve this problem under the name of town planning. Today it is recognized that broader principles must be applied if a solution is to be found. This requires the co-ordinated team work of economists, sociologists, geographers, architects, engineers, legislators, municipal officials and the people. This co-ordination of effort is called Community Planning.

The governing purpose of Community Planning is to plan and build,—or, more commonly under present conditions, to replan and rebuild—for the material and spiritual well being of those who dwell, work and play in the community, both urban and rural. To achieve this, it is generally recognized that broad aspects must be considered. To-day no community can be considered as a detached entity; all form part of a national and regional pattern. Comprehensive planning cannot be undertaken without thorough knowledge of economic, social and physical conditions of the region in which the community is located. The objective is to take full advantage of all resources for human needs.

In planning for rural areas, towns or cities the community services, such as

EDITOR'S NOTE: S. A. Gitterman, B. Arch., M.R.A.I.C., is Supervisor of the Community Planning Division of Central Mortgage and Housing Corporation, Ottawa.

health, education, recreation, crime prevention, etc., are equally or more important than the pure economic or physical considerations. It is now believed that in addition to space for such activity, organized programs and adequate supervision are requisites in the planning process.

It is beyond the scope here to deal with these broad aspects. Objectives of physical planning pertaining to towns and cities will be stressed and economic and social aspects only treated where necessary.

Every town must be economically efficient, a comfortable place in which to live and make a living, and as beautiful as may be within the limitations of the taste of the time and of the material and social resources at hand. It must provide a good environment in which to bring up a family. Lewis Mumford, one of the leading planning authorities of the day, has repeatedly emphasized in recent years the necessity of basing city plans primarily on biological considerations. Family life is still the backbone of our communities.

In to-day's cities no physical limits based on human needs exist between the different neighborhoods. Limits are only of the conventional and administrative types. Land use areas and buildings destined for different social functions are definitely insufficient and located at random. Neighborhoods themselves have no organized social life of their own and exist only in name.

Many practitioners believe there is one way by which the physical pattern of our cities can be made to fit the required social pattern. This consists in transforming their actual inorganic shape into an organic living body. This can only be done by breaking up the cities (and their suburbs) into well defined and well planned units.

Each of these units should be of limited area and population. It should be protected from encroachment of nearby units by buffer strips or green belts of open space. Each unit should provide

for the social life for which it is intended and buildings grouped according to function.

Modern planners have generally accepted the principle that five basic planning units are required. These are, in order of magnitude, not importance (a) the neighborhood unit, (b) the sub-community, (c) the metropolitan area, (d) the trading area and (e) the region.

### Neighborhood Unit

The neighborhood unit is the basic one. It is the smallest unit of social integration. Whereas there is no complete agreement concerning its size it has been accepted for practical purposes as that necessary to maintain an elementary school. It has been fixed at various figures from 3,000 to 10,000 inhabitants. A neighborhood unit can only afford to maintain the basic social services such as an elementary school, a neighborhood playground, play lots for pre-school age children, a church, shops, library and emergency clinic. Community Centre facilities are sometimes included but they may be provided as a centre of several neighborhoods.

It is generally accepted that the maximum distance from any house to the elementary school should not be more than half a mile in urban areas. Acreage will depend on the predetermined density of population. A high density will result in over-crowding; and too low a density will create large acreage and long distances from the social centre and so will reduce its efficiency. In addition excessive dispersion results in costly over-extension of roads and utilities. Figures on density and acreage vary and can only be established locally after careful study. An average neighborhood of about 5,000 inhabitants usually covers approximately 500 acres.

The playground area and the school ground should be integrated to permit the maximum use for children. A location which would result in safety for children and elimination of traffic hazard is desirable.

In some zoning regulations for Class A residential areas, no provision is made for shops. Shopping areas like other facilities, are necessities and if not planned for, may sprout haphazardly, encouraging blight.

The neighborhood street pattern provides for local traffic only. It will determine the shapes of lots as well as provide access to the various parts of the neighborhood. Vehicular traffic and pedestrian traffic should be separated as much as possible. Through sound planning a street system can be devised which will not only improve function but also be less costly. From various studies it has been found that savings in cost as high as 30% over a haphazard grid pattern can be achieved by a street system designed for specific traffic conditions and safety.<sup>1</sup>

### Sub-Community

The sub-community should have sufficient population to support complete social services. These include all those that are required in an independent city of small size such as high school, civic and cultural centres, amusement and recreation areas, main commercial district and industry. Light industries distributed on pre-planned limited areas in the vicinity of the sub-communities are desirable. Means of communication between all of these areas should be as easy as possible.

The size of such a sub-community has been estimated as ranging from 20,000 to 50,000 inhabitants. This means that about four to six neighborhood units are required to form a sub-community. This is believed to be the minimum population capable of maintaining the necessary services.

Such communities may be protected from each other by green belt buffer strips of open country. This will tend to bring open country into the hearts of the cities. When the city or metropolitan

area grows it should do so by developing new units until each reaches saturation; then new units can be started elsewhere.

Super highways or parkways carrying through traffic should not split these communities but by-pass them. Safety in our cities is very desirable. In one town that was analyzed it was found that 57% of the accidents had out-of-town cars involved. Out-of-town cars were also involved in the only two accidents in which deaths resulted. Most of these accidents occurred on the main highway through the town.

It is obvious that there is a great deal in favour of highways by-passing towns. If such highways are well connected to the road systems of the communities and neighborhoods, it is possible to enter easily for those who wish to do so. All others can pass right by the town with the utmost of convenience and minimum of hazard to the town dwellers and themselves.

### Metropolitan Area

The metropolitan area actually is a conglomerate entity. In every metropolitan district, large numbers of people live in one municipality, work in another, do much of their trading in another and make extensive use of recreation and other facilities in still other political subdivisions within the same urban area. Planning which does not embrace all these communities that are so closely related socially and economically is not comprehensive. Commonly no single local government unit contains all the urban areas which should be planned as a whole. The formation of a metropolitan planning commission is necessary to meet this problem.

### Trading Area

Surrounding each urban centre there usually is an area that bears an interdependency with the urban centre. People from this area usually provide produce to the town for its consumption or transportation. They use the town's shopping, banking and amusement facilities. This

<sup>1</sup> See for example *Building New Neighbourhood* (The Chicago Plan Commission, July 1943.)

area can be referred to as the "Trading Area." In planning a metropolitan area provision must be made for the inhabitants of this economic area. The effect will reflect in the sizes of the main commercial districts, markets and transportational facilities.

The Trading Area is generally agricultural in character. In planning, it is necessary to make a distinction between urban and rural land use. Frequently the farms adjoining urban centres are subdivided for building purposes, with large profits for the promoters. This is usually done in boom times when there is a demand for housing. Services are optimistically installed including roads, sewers, water supply lines, sidewalks, etc., only to remain unused and a financial burden if the boom does not continue. It is seldom that adequate school facilities are planned.

This process is usually profitable for some farmers, promoters and some urban dwellers. The latter move to the outskirts to take advantage of low taxes but continue to use the services of the urban centre. When such a move takes place, the tax revenue in the urban centre drops but of course the expenditures and commitments remain. As a result, if such a movement becomes severe, the urban centre may become economically unsound and face bankruptcy.

On the other hand, it does not help the rural area. The new subdivisions require additional services including schools and the rural municipality is forced to provide them. The cost is borne partially by the adjoining farms. At its extreme the farmers soon find the tax rate higher than their lands can carry as farms. They have two alternatives, (a) to subdivide their farms or (b) to carry on in an impoverished condition. The former process does not aid the condition because in a depressed period the land will probably not be purchased and in boom times it will be further subdivided without consideration of basic need. This may take place while building land is still available in the urban centre.

The effect of this process on the inhabitants of the trading or agricultural area is obvious. A planned policy of urban growth can eliminate the effects of uncontrolled urban expansion.

The Trading Area generally includes villages and sometimes towns as well as farms. It has a community life of its own that should be recognized and planned for. In planning this area, the objectives are the same but the principles may vary. Lesser population densities and greater distances are involved than in towns and cities. For example, the trading area of an Ontario or Quebec city will be quite different in character from one in the Prairies. Each can only be planned after a careful analysis of local conditions.

### The Region

The Region is the next unit of planning. Regional, provincial and national policies, plans, programs and projects often have important effects on the physical and social structure of a city and its surrounding urban areas. Highway, railroad, water and air transportation facilities, for example, perform regional, provincial and nationwide functions; and their location, size and design may depend more upon these factors than upon purely local considerations.

Attempting to prepare a master plan of a municipality without a thorough analysis of social, economic and physical data applicable to the Region and the whole metropolitan area will result in a plan that is merely superficial. To create sound plans these factors must be considered. In the planning process the Regional survey is the first step.

### Master Plans

To guide the development of urban centres, master plans are generally prepared. These usually consist of a broad scheme planned for achievement in 20 to 50 years. Many of these master plans are admirable pieces of work—many were made in the last planning boom of the twenties, and some were made in

Canada as far back as 1915. The majority, however, now rest in the archives—dead and unused. New plans are being made. If this process continues, planning will not accomplish much.

In our modern civilization many changes take place in a period of twenty to fifty years. The master plan conceived today will likely not be applicable at the end of such a length of time. Nevertheless to carry out a community plan, it is necessary to have some goal; the master plan provides this goal. It may be termed "Master Guide." In England, it is called "Outline Plan." Whatever term is used the objective is to serve as a guide only.

Within the framework of this "Guide" are the neighborhoods and communities roads, commercial and industrial areas which are built up from day to day.

The suburban subdivisions being erected today, whether part of an overall plan or not, form the basic pattern of our cities and towns for fifty or more years to come. One neighborhood well planned today is far better than a multitude of master plans that remain unused. Every "Master Guide" should have one or two neighborhoods carefully planned to indicate the trend for the immediate future. If well designed, people will prefer to build and live in these areas where they know they and their children will be safe, schools provided and well located, with recreation areas and shops. While this immediate need is being met, proper surveys can be carried out to provide the requisite data for long range urban and regional plans.

Zoning regulations are intended to provide municipalities with the police power to implement their master plans. These regulations can only function well if prepared after the master plan has been carefully established. They are intended to assure that the land use areas established will be maintained and built on as planned. Some municipalities drafted zoning by-laws in the past without benefit of careful survey and analysis and considered themselves planned. In

one Canadian city 800 amendments have been made to these by-laws. This is not uncommon; under such circumstances zoning regulations cannot be effective.

The determination of the various use areas must be in accordance with population needs. For example, a shopping area must have a definite relation to the number of families it is intended to serve. Figures on this item vary from two lineal feet of shop frontage per hundred of population in the neighborhoods to sixty lineal feet in central urban districts. With such a variation it is obvious that great care must be exercised in the establishment of the areas. If the areas provided are too small the pressure of expansion may cause blight in the adjoining residential properties regardless of zoning regulations.

Plans which are prepared at great cost of time and effort and then remain unused are not worth the paper on which they are printed. To assure the execution of such plans it is necessary to consider not only the technical and social aspects, but they must be prepared so as to be financially capable of achievement. Vast expenditures on plans for projects which are financially impossible will only tend to result in hindering the planning progress of a city.

### Summary of Principles

To avoid the mistakes of the past, broad overall plans for the development of regional and urban areas as a whole must be prepared. Such an overall plan should include, among other things, the proposed allocation of land uses to specific land areas, major thoroughfare and transportation system, density and distribution of populations, and the proposed general location, character and extent of subcommunities and neighborhoods within the whole urban area. Naturally such an overall plan must be founded on a thorough understanding of all pertinent social, economic, political, and physical conditions of the Region, Trading and Metropolitan areas.

The following basic principles must be borne in mind in the preparation of any community plan:

1. Primarily planning must be directed to satisfying social needs and functions for both private and community undertakings.
2. Compactness of urban development without overcrowding and with ample open space for healthful living, recreation and amenities is necessary in order to promote efficiency, economy and agreeableness of urban living.
3. The land use plan (allocation of uses to areas) of regional, rural and urban areas must be carefully assessed in scale with needs, well balanced and co-ordinated.
4. Plans must be adjusted to topographical and geological conditions to make the best and most economical use of land.
5. Overall plans must be based on long range objectives and kept sufficiently flexible to admit of adjustment in accordance with new and changing conditions, but must also provide for required immediate projects.
6. Neighborhood units must be well defined and coherent; must be sufficiently large to maintain their own character and values; and must be fully protected from the hazards and annoyance of major traffic routes and from noise, dirt, smoke, odors and confusion of commercial and industrial activities.
7. The major thoroughfare and transportation system must be so planned and constructed as to permit speedy, convenient, economical and safe movement of persons and goods to and from any part of the metropolitan area without interference with the living, working and recreational activities of the people.

8. Plans must be big enough to accomplish all major objectives and still be in scale with ability to finance.

Activity in town planning in Canada has been sporadic since early in the century. From 1910 until 1930 most of the provincial planning acts were passed, and many urban master plans made. The depression of the thirties caused a definite retardation and planning activity remained dormant for about eight years. From then on interest revived and in spite of the intrusion of World War II it has reached a high degree at present.

In June 1946, a conference on Community Planning was held in Ottawa. It was attended by professional, social and governmental delegates from all Canada. A great deal of discussion took place concerning various planning matters. It was agreed that while technical planning was progressing there was not sufficient interest shown on the part of the public. It was felt that without active participation of the people themselves, it would be difficult to achieve comprehensive plans. As a result The Community Planning Association of Canada was formed to foster an interest and participation in planning. The activities and policies of the new Association are more fully described elsewhere in this issue.

If plans being prepared to-day are to be saved from a fate similar to previous ones, they must avoid the pitfalls of the past. It does not matter whether a street pattern is the much abused grid or a graceful curvilinear pattern, it will be successful if the areas have been designed for social needs. Beauty will result from a well integrated plan but beauty in itself is not of prime importance. A city cannot be beautiful if its children must play on streets in the paths of vehicles—if houses are poorly located and crowded—if schools are inadequate and if poverty is common. Community plans will stand greater chances of success if designed on basic principles and it is widely understood locally, that they provide for social needs.