Surely it should not be too much to expect that land subdividers should plan ther subdivisions with some regard to the convenience and welfare of the communuity, and should set aside some portion of their holdings to provide other essentials of good living conditions in addition to housing.

The planning scheme provides for new residential zones in areas still unsubdivided. In these cases, subdivision must be better than in previously subdivided areas, and include adequate and properly located parks and playing fields, centres for public assembly, properly sited and designed shopping centres, all planned having regard to the needs and special features of the locality. In other words, subdivision should be carried out in accordance with a properly prepared planning scheme for the area.

As has been stated earlier, such detailed planning is not considered to be within the scope of the Board's present responsibility, and in any case the time available would not have permitted proper consideration of all the areas involved.

However, to safeguard the position, where these new residential areas are either wholly or substantially still unsubdivided, they have been designated *Living Zones*, and residential development in them restricted in the main to existing subdivisions, so as to afford the opportunity for detailed planning schemes to be prepared before any further development takes place.

The total area allotted for residential zones will, when fully developed, accommodate at present density standards a population of 2,500,000, a figure likely to be approached only towards the end of this century. Much of the area so zoned is not essential for immediate metropolitan requirements. Therefore, to prevent its premature development and to avoid the consequential dissipation of the resources and finances of the public utility and transport authorities, some of the living zones have been zoned as *Reserved Living Zones*. In these, land use has been restricted even further than in the living zones to ensure that they will not be developed until roads and public utilities and transport services can be provided economically and within a reasonable time.

Although a certain proportion of the people prefer to live near the city centre under conditions which make for relatively high population densities, there are others who seek areas where they may live in semi-rural surroundings on allotments much larger than normal. These people, having escaped from a suburban environment, naturally wish that when they establish their homes they may be protected from the encroachment of suburban type subdivisions. This is reasonable, and in some areas private subdividers have ensured this by imposing building covenants on the subdivided lots. The planning authority must recognise this desire, because all sections of the community must be catered for. Therefore, on the outskirts of the urban area, certain zones, aggregating about 3,000 acres, have been provided in which the future subdivision of land into lots of less than one acre will not be permitted. This will result in very low density development, which will increase the cost of providing the utility services. In this form of development the provision of reticulated sewerage facilities in particular will be generally too costly, but in lots of this size the difficulty can be overcome by the installation of individual septic tanks, for which the size of allotment and the areas selected are eminently suitable.

THE LOCATION OF FUTURE RESIDENTIAL AREAS

In deciding the areas to be zoned for residential use, consideration was given to a number of factors, the principal of which were:

- (a) The existing use of the land.
- (b) The existing and proposed use of adjoining land.
- (c) The desirability of including additional areas for the proper growth of neighbourhoods already being developed.
- (d) The need of additional land to house the workers required for industries in areas deficient or likely to be deficient in worker population.
- (e) The desirability of including certain good residential land because of its relationship to major public services either now existing or forming part of contemplated extensions.
- (f) The physical suitability of the land for residential purposes.
- (g) The facility with which public utility services can be provided and the cost of such services.
- (h) Where people want to live.
- (i) The relationship between home and prospective employment.
- (j) Public transport facilities.

Except for the low-lying areas along the River Yarra and between Mordialloc and Frankston, there are no substantial portions of the metropolitan area which, with the construction of normal storm-water drainage facilities, are physically unsuitable for residential purposes. However, the silurian areas to the east and north-east and the tertiary areas to the south, are more suitable and more attractive for building purposes and for gardens than the basaltic areas of the west and north.

Generally speaking there is no part of the metropolitan area to which the usual public utility services cannot be extended, but the provision of a water supply for those areas in the north at an elevation of more than about 500 feet above sea level, and of sewerage facilities to outer portions of the metropolitan area to the north-west, north and north-east would be substantially more costly per unit of area than to other parts of the metropolitan area.

The cost of providing water, sewerage, gas, electricity and telephone services in the basaltic areas of the north-west is greater than in the silurian areas to the east and the tertiary areas to the south. Local street construction costs (which are borne directly by the properly owner) also are substantially greater, and there is also some extra cost in the dwelling itself. Thus the development of the city to the east and south will be more economical to the community, to the general ratepayer, and to the individual home owner.

In selecting areas for residential development it is important that they should be chosen so that, while they will permit people to live in those parts of the area which they favour, they will also enable the city to be developed having regard to the cost to the community in providing those works necessary for good living.

One of the significant facts disclosed by the survey was the marked and increasing preference over the past fifty years for living in the eastern, south-eastern and southern suburbs and the relative unpopularity of the western suburbs. Since 1910 the trend has been for about one-third of the population increase to settle in the central, northern and western districts, and about two-thirds in the eastern, southeastern and southern districts. Study shows clearly that the reasons for this trend are the more attractive physical and climatic characteristics of those favoured suburbs and the proximity of the attractive countryside to the east and of the beaches to the south. There is therefore every reason to conclude that this marked trend will continue.

Very substantial industrial development has occurred in the western suburbs, but because of the unpopularity of the area for living purposes there is within these suburbs a substantial deficiency of resident industrial workers, and in consequence many workers have to travel from distant suburbs to work there. This is not only disadvantageous to the workers but also to industrialists, who find the locality otherwise suitable for their requirements. We are thus faced with two conflicting problems — the need of the western suburbs for more residents and the general unpopularity of the area for living purposes.

It is an inescapable conclusion that the general desire of the majority of the people of Melbourne is to live in single family dwellings set in allotments of substantial size, notwithstanding that the consequential low density development has disadvantages already discussed.

Having regard to these factors the policy which has been adopted in determining residential zones has been:

- (a) To include all areas now used for living purposes except where, because of changing use or other reasons, they are now unsuitable for this purpose, or where another use has a greater need for the land.
- (b) To expand these zones where and to such extent as it is deemed necessary after considering the factors above enumerated.
- (c) To recognise the strong preference for residence to the south and east, and the relative unpopularity of the west.
- (d) To recognise that development to the south and east is generally more economical to the community than development to the north and west.

- (e) To endeavour to encourage redevelopment of the old inner suburban areas so that improved living conditions will make them more attractive for living purposes.
- (f) To encourage residential development in localities needing a greater worker population.
- (g) In conjunction with other provisions of the scheme, to encourage the development of the townships of Dandenong and Frankston.

THE DISTRIBUTION OF THE POPULATION

For planning purposes it is necessary to determine not only where people should live in future, but also how closely together they will live. This is referred to as *population density*⁽¹⁾ and is conveniently expressed as the number of persons per acre. Not only is this necessary to determine the extent of the land which must be set aside for residential use, but all the amenities and conveniences of a modern city must finally be related to the population which they serve.

The existing density pattern is illustrated in map 5, and for comparison the estimated future pattern is shown in map 6. The corresponding distribution of the estimated future population increase is shown in map 7 in comparison with past trends. It will be seen that it has been assumed that the population of the central district will be maintained at about its present level and that in the other sectors the same general trend will be maintained as in the past. The north and west are assumed to receive about one-third of the population increase, and the rest of the area two-thirds, which has been the general experience during the present century. The distribution of the planned population among municipalities in comparison with their present populations is shown in Appendix II.

No attempt has been made to fix lower limits to densities for certain areas. This is considered of little real value. It is more realistic and more practicable to fix an upper limit, adopting the floor space index method which determines the ratio which the total floor area of the building bears to the lot area, together with half the abutting road area. It is believed that this will set a measure for land valuation, and that economic considerations will gradually result in the population of the area ultimately approaching that which is contemplated in the planning scheme and on which the provision of amenities has been based.

RESIDENTIAL ZONES

To meet the varying needs, and to encourage the growth of the planned density pattern, the planning schemes provides for *Residential A*, *B*, *C* and *D* Zones, for which the conditions have been framed to permit high, medium, normal and low density developments respectively. In the living zones provision has been made for development at normal density.

⁽¹⁾ For the definition of the terms used in this report in relation to density, see Appendix I.