

Predicting future population is based upon an examination of existing trends. It is important to know if there are any signs of change in the factors governing population size. For example, it is useful to know the birth, death, marriage, and fertility rates, together with the levels of migration. The underlying tendencies in the population should be examined to see if there is a trend in the population towards ageing, or a trend towards a greater number of working females, or towards more but smaller households. The designer would want to know the tendency towards the physical distribution of changes. Knowledge of the existing population, together with any trends and tendencies which can be discovered, together form the basis of forecasting future population.

Forecasting population is a speculative business. Demographers are extremely guarded about attempting to forecast the future particularly of small districts of the city. The smaller the area of study, the less reliable are the forecasts. If it is decided to engage in this hazardous enterprise then there are a number of techniques for making population forecasts. The most basic is a continuation of the recent past into the future by extending a straight line graph based on the assumption that current trends will persist. A popular technique for forecasting future population is the Cohort Survival Method.¹ This technique adjusts census figures in forward steps, by age and sex groups, year on year, until the date of the project completion. Adjustments are made to the figures for changes in birth, death, fertility, in- and out-migration: 'In essence what it does is to trace a particular age group, for example 0-4 years through their estimated life cycle making deductions for projected deaths based upon life tables, and amendments for net migration. The next 0-4 age group is calculated by reference to the fertility rate of the number of 'survivors' remaining in preceding groups or cohorts'.²

There may be other areas, as well as population, for which projection may prove useful. For

example, further information about population and its changing patterns of employment, income and expenditure may throw light on possible demand for housing or other goods. The rates at which the housing stock is declining in numbers and quality of maintenance or the changes in patterns of ownership, or, indeed the general changes in land-use patterns may be of significance to the project. The nature of the project and its goals will determine the factors to be investigated and which particular trends, when analysed, will prove useful for the development of the project.

The analysis of trends becomes a more useful design tool when comparisons can be made between the study area and the city, its region, or the nation as a whole. A knowledge of population trends in the study area may be essential for design purposes but when those local trends are compared with those in the larger community the significance of local change may be highlighted. This comparative element in trend analysis applies equally to employment, housing conditions or car ownership patterns. All trend analyses should embody a comparative element.

A more imaginative technique than trend analysis for assessing future possibilities is scenario design. Using this technique the designer constructs possible futures imagining the major factors which may affect the way people live. Major events such as a sea change in political attitudes; an oil crisis; a stock market crash; joining or not joining the EURO; and many other possible future events can be built into a series of different scenarios. These scenarios can be fed back into the forecasts, which in turn result in a set of different trends for any topic analysed. The trends can then be presented graphically. It is usual to present three trends and their resulting forecast for each topic; one where the assumptions are favourable, one where they are unfavourable and the third somewhere between the extremes. Scenario building is, above all else, a tool of the imagination and therefore most useful for the designer seeking ideas.