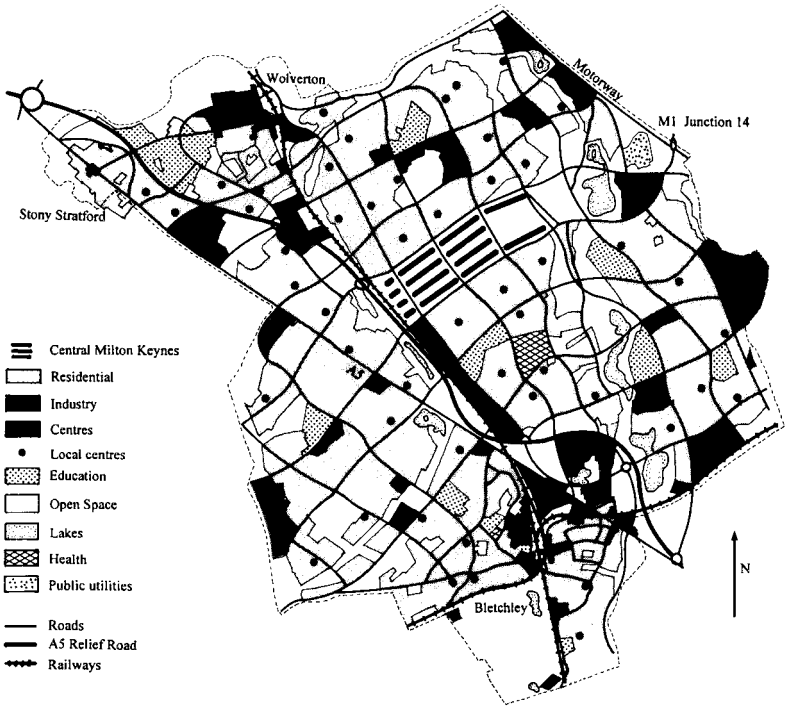

Figure 7.35 Milton Keynes (Llewellyn-Davies, 1971)

requirements. There will be about 60 of these centres with different groupings at each . . . the residential areas are not planned as inward looking neighbourhoods, as in the first generation of new towns, but rather as outward looking to a transport route that links rapidly with other parts of the city. Following the principle of giving the maximum possible freedom of choice to future residents, the plan aims to give scope for the free use of the car unrestrained by congestion while at the same time providing a high quality public transport system from the beginning, not only for those who need it but also for those who might choose to use it instead of private transport' (Osborn and Whittick, 1977).

Figure 7.35 shows the structure of the city which resulted from the extensive investigation of urban form carried out by the consultants with the assistance of an array of academic helpers. Essentially, the planners were attempting to fulfil a set of high-minded goals (Llewellyn-Davies *et al.*, 1970):

(1) Opportunity and freedom of choice.
(2) Easy movement and access, and good communications.
(3) Balance and variety.
(4) An attractive city.
(5) Public awareness and participation.
(6) Efficient and imaginative use of resources.

In hindsight, it is easy to be critical of a particular approach to the planning of any city, including Milton Keynes. Nevertheless, it is useful to examine the plan in relation to the current debate about sustainable development to see if the Milton Keynes experiment has anything to offer planners of today, particularly as there are proposals to extend the city. The consultants concluded that: '. . . only those plans offering potential for low concentration of work places and low residential densities were likely to meet the goals' (Houghton-Evans, 1975). Such a conclusion limits the effectiveness of public transport and places an undue emphasis on mobility based on private transport. It also increases the use of land and urban infrastructure costs. Both of these effects result from the choice of urban form, and run counter to the principles of sustainable development. The plan for Milton Keynes was criticized at the time by the National Farmers' Union and the National Union of

Agricultural Workers. They claimed that the site was one of the most important grain-growing areas in the country, and with improved drainage they thought it could be an area of exceptionally high production. From the viewpoint of sustainable development, the loss of an important environmental service such as food production was an unfortunate outcome of a plan based on wasteful densities.

The North Bucks Association was formed by the residents to oppose the proposal for the new city. The Association represented the parish councils in the area. Amongst its objections was the need for a national physical planning policy for Britain before a decision should be taken to increase the population of Buckinghamshire. The association argued that it was necessary to secure a more evenly balanced distribution of population throughout the country: it was advocating development proposals which would relocate or retain population in less densely populated areas where space, water supply and sewage disposal presented less serious problems. Such a policy, it was argued, would relieve the pressures in the south of the country in places like Buckinghamshire (Osborn and Whittick, 1977). These points are equally valid today for those advocating sustainable development. The dismissal of these arguments prepared by a resident's group throws into question the vigour with which Objective 5 of the consultants' brief, 'participation', was being pursued. Participation, of course, is a key concept in the process of sustainable development. It seems that, on balance, the first proposal for Milton Keynes by the County Council's architects was more imaginative in the way it proposed to use resources and more innovative and 'green' in terms of urban structure than the plan that was eventually developed.

Public transport is seen by many as the key to developing sustainable cities. It seems, therefore, that the grid plan, in the way it was developed in the 1960s as a means of accommodating the motor car, is inappropriate for fulfilling the goals of sustainable development. There is a fundamental relationship between urban form and the transportation system which services the city. Buchanan, Ling, Llewellyn-Davies and the many others working on urban planning in Britain in the latter half of the last century, were fully aware of the close connection between transport and city form: an analysis of this relationship is given great prominence in, for example, the reports on new towns (some of which have been discussed earlier in this chapter). The divergent views held on public as opposed to private transport to a large extent account for the difference in urban structure between Milton Keynes and Runcorn. The planning for sustainable development requires the application of a new paradigm for urban transport and consequently a new urban form. There are four main planning principles for sustainable urban transport. The first principle is that urban structure should reduce the need to travel. The second principle is that urban form should promote and encourage walking and cycling. The third principle is that urban form should be designed to give priority to public as opposed to private transport. The fourth principle seeks to develop an urban structure which encourages the movement of more goods by rail and water and discourages movement of goods by road.

Applying planning principles of a sustainable transport system would result in a form of grid which would be very different