This book presents a comprehensive overview of the planning and policy issues in South African settlements. The authors give their diagnosis of the current development of transport movements. It is unsustainable, in their view, as it is based primarily on the use of the private car. The present behaviour is a legacy of the apartheid period, which was characterised by the strict application of modernist principles to urban design and transport planning. But the authors also deal with policy. They consider ways to remedy the present situation and, at the same time, they promote a new approach to urban planning and design. The new approach calls for a more efficient and effective use of integrated (public) transport systems. The aim would be to increase accessibility and diminish the volume of mobility, thereby reducing the negative environmental and social impact. In such a context, the main policy developments would be directed toward more integration of planning and design.

The book consists of eight chapters (including the conclusions). The first one, “Defining the problem: the objectives of this book”, points out that the modernist approach to urban movement, which is still entrenched in many countries, is entirely inappropriate. It is the source of many problems in urban areas, particularly in South Africa. In that light, new planning legislation introduced there during the last decade of the 20th century called for radical changes in transportation planning practice. These laws promote a range of objectives: to make the cities more compact; to emphasise the social advantage of public transport over private transport; to diminish aggregate movement; to improve accessibility; to enable the integration of public and private transport modes; to enable better integration between land-use and transport planning; and to recognise the environmental impact.

Chapter 2, “Setting the scene”, describes three interrelated forces propelling the development and growth of South African settlements. The market-driving forces have always implied close relationships between patterns and processes of land development and transportation. Indeed, once transport networks have been established, the accessibility...
surface and land-market development have responded to this. Public planning has been based on two ideologies: modernism and the socio-economic policy of apartheid. Modernism has stimulated the development of freestanding basic building blocks, whereby the settlements are surrounded by open space. The inherent weaknesses of modernism have been exacerbated by the policy of apartheid. It has undermined modernism by extending the concept of the ‘desirable separation’ of activities and related space to apply to race. Informal settlement formation has implied setting up shelters by individuals or smaller groups of households. They usually settle on public land. Their location choices are based on a rationale such as ‘avoiding legislative action of the authorities’ or taking advantage of the ‘availability of public land’.

The spatial outcomes of such development have generated a large volume of transport movement. Most mobility is by private car and mini-bus; much less of the increase is due to public transport, which has had to be subsidised. Competition has also been compromised. In addition, much agricultural land has been lost. One effect is an increase in air pollution and other externalities. Furthermore, some locations are now only accessible by car.

Chapter 3, ‘‘Approaches to settlement-making: locating the concepts of structure and space’’, describes the pros and cons of programmatic versus non-programmatic approaches to settlement design in South Africa. A programmatic approach implies a ‘scientific’ calculation of the space demands and land use. It also entails setting up a schedule for use according to generalised thresholds and standards. Such an approach is aimed at optimising the activities of parts of the system instead of the whole system. So far, it has hampered individual choice and, created a monotonous environment. Moreover, in a system based on the separation of activities, the programmatic approach has generated an enormous amount of movement. A non-programmatic approach has, at its core, requirements for compromise between parts of a given settlement. Compromise means optimising the activities of the whole rather than maximising those of any particular part. Essentially, this approach creates opportunities for choice while promoting the public interest. Consequently, it enables the distribution and accommodation of human activities in space and encourages land use that takes the qualities of urban performance into account.

Chapter 4, ‘‘Movement as an element of urban structure and urban space’’, considers the role of mobility in determining accessibility networks. Movements are seen as the key to the distribution of activities in urban settlements. Two types of movement are distinguished: on foot (pedestrian), at a low level; and by modes of transport, at higher level. Both types use ‘space integrators’ and ‘space bridges’. At the higher level, the movements stimulate the clustering of particular activities along the ‘space integrators’. These clusters, in turn, enable an efficient and effective use of public transport. Accordingly, they lead to the emergence of ‘corridors’.

Chapter 5, ‘‘Movement in urban structure: the case of South Africa’’, casts movement in one of the key roles in non-programmatic planning. The central idea is to make settlements as pedestrian-friendly as possible. This is accomplished by encouraging people to walk, while also promoting an efficient and effective use of the integrated public transport systems. Various conditions for achieving such mobility patterns have been identified. These come down to developing integrated and hierarchically organised systems of public transport. The systems should run along corridors with many entry/exit points, thereby enabling a maximal degree of accessibility. Such an approach would help replace the idea of driving as the central concept of the modernist approach.