

# **Public Transport in Developing Countries**

# **PUBLIC TRANSPORT IN DEVELOPING COUNTRIES**

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# **PREFACE**

## **SCOPE AND PURPOSE OF THIS BOOK**

Transport problems in both developed and developing countries, and the planning and management of transport systems in developed countries, have been the subject of numerous books. However, while many of the characteristics of public transport are common throughout the world, there are others which are unique, or of greater significance, to developing countries. In addition, with a higher proportion of the population dependent on public transport in these countries, the problems tend to be much more critical. Thus there is a need for a book which addresses the issues of planning, regulation, and management of public transport specifically in developing countries.

This book aims to meet that requirement. It examines and explains the problems and characteristics of public transport systems in developing countries, and discusses the alternative modes, management methods, and forms of ownership, control, regulation and funding, in the context of different stages of development, operating environments and cultural backgrounds. While it deals with urban, rural and long distance transport services, a significant part of the content is devoted to road-based public transport systems in urban areas: this emphasis reflects the magnitude of the urban transport problem, and the predominance of road transport in most developing countries. However, in the planning or operation of any public transport system, it is necessary at all times to consider the alternatives, as well as the complementarity of the different modes. Other forms of transport, including light rail transit, suburban and long-distance rail, are therefore also covered in this book, albeit in much less depth than the principal road transport modes. The planning of bus services, particularly in urban areas, is covered in some detail, since this is often an area of considerable weakness. Similarly, the management of transport services and the maintenance of vehicles, including vehicle design and transport fleet planning, are also dealt with at length.

There is no clear definition of a “developing country”. The term tends to be used loosely, as it is in this book, and applies mainly to the poorer countries of the world, principally those in Asia, Africa and South America. Every country in the world is developing to some extent,

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although the rate of development varies significantly; some countries, which may still be regarded as developing, have reached a much more advanced level of development than others. Some are in fact becoming poorer: populations are increasing rapidly, but economic growth is slow or even negative, so that purchasing power is diminishing, and achievable standards, including those of transport services, are falling as a result.

There are a number of important differences between the operation of public transport in developing and developed countries. Income levels are lower in developing countries, resulting in low car ownership and hence a strong demand for public transport, and a supply of relatively cheap labour; low incomes also lead to problems of affordability of fares. There is often a lack of skills, at various levels: skilled drivers and mechanics, as well as skilled managers, may be scarce. In the poorer countries shortage of funds is a major problem, while political instability, poor enforcement of laws and regulations, and corruption may have a significant effect on the management of a transport system. Road conditions tend to be difficult, with poor road surfaces on inter-city and rural routes, and severe traffic congestion in urban areas, while climate is often more of a problem in developing than in developed countries. Standards of safety, comfort, punctuality, reliability and air and noise pollution, and users' expectations, are often far lower than those in developed countries; for example, people in some countries do not expect buses to run to schedule, and are prepared to endure long waiting times, and to travel in conditions which would be unacceptable elsewhere.

While the developing countries have many characteristics in common with one another, there are also very significant differences between them, particularly in terms of culture, geography, expertise and stage of development. No two countries or cities are alike, and each has different problems. Many of the problems discussed are not encountered in every country, while others may vary considerably in severity between one country and another. Similarly, although in broad terms the potential solutions are often similar, and some measures are applicable in most situations, the differences must be recognised and taken into account. What may be appropriate in one case may not be workable or acceptable in another, and solutions need to be tailored so that they can work within the prevailing environment. In addition, while the highest possible standards should be aimed for, it is important to be realistic with regard to what can and cannot be achieved. The objective of this book is therefore not to prescribe universal or "ideal" solutions to the problems, but to show how the various options for future development may be identified, and how to determine which are most appropriate in the circumstances.

Several of the countries mentioned in this book may be regarded as developed in many respects, although their transport problems may be similar to those in much less developed countries. In any case, much of the content of the book will apply equally to developed countries, and examples from developed countries have been included where these are considered to be useful or relevant. Since the pace of development in some countries is rapid, many of the specific examples given in this book may be out of date; this does not, however, detract from their relevance or validity.

## **THE AUTHOR**

Richard Iles began his career in transport in the United Kingdom in 1964, but has spent most of his working life in developing countries. He was born in England in 1945, and was interested in transport from an early age, choosing to study economics at the University of Newcastle-upon-Tyne with a view to eventually working in the transport industry. At that time there were few degree courses with a significant transport content, and his course was no exception, but as an undergraduate he submitted a dissertation on the economic problems of rural transport. After receiving an Honours Degree he spent a further two years at Newcastle as a postgraduate carrying out research into economic aspects of the co-ordination of transport. As a student he worked during the vacations for Scottish Omnibuses Ltd. in Edinburgh, as a bus driver and in various administrative capacities; on leaving university he joined another major Scottish bus company, the Central S.M.T. Company, as a junior manager.

After a few years with Central he decided to broaden his transport experience and moved into the logistics field as a distribution depot manager for a food company. This was followed by a spell as manager of a London coach company, operating long distance and tourist services. He then entered the consultancy profession, in which he was involved in a variety of projects in passenger and freight transport and distribution, both in the United Kingdom and overseas. Finding overseas work interesting and stimulating, in 1977 he joined United Transport Overseas, which later became United Transport International (UTI), a holding company with subsidiaries in road passenger and freight transport in many parts of the world.

With UTI he worked first as a consultant on assignments in several countries, and later in the management of some of its subsidiaries in Africa. In Kenya, he was involved in the management of urban and long-distance bus services, a large tourist operation and a passenger and vehicle ferry service. For six years he was Managing Director of United Transport Malawi Ltd, which was jointly owned by the Malawi Government and UTI, and operated passenger transport services throughout Malawi and into neighbouring countries, as well as freight and car hire operations. Following UTI's decision to withdraw from transport operation in developing countries, he started a small consultancy business, IBIS Transport Management Services, in 1990, but has been operating as an independent transport consultant since 1996. In this capacity he has worked in more than twenty different countries in Africa, Asia, the Middle East and the Caribbean. As well as advising on passenger transport, he has worked on other road transport projects including several involving the management of government vehicle fleets in various African countries.

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## **PROBLEMS AND CHARACTERISTICS OF PUBLIC TRANSPORT IN DEVELOPING COUNTRIES**

### **AN ILLUSTRATION**

It is late afternoon on a weekday in a large city in the tropics. The weather is hot and humid, and the heat reflects from the road surface and from the broken concrete of the footpaths. Some shade is provided by the concrete spans of an elevated highway, its supporting columns scarred by frequent assaults by badly driven vehicles. The traffic, both at street level and on the highway, is congested and slow moving; for long periods it does not move at all. Vehicles are illegally parked along both sides of the street; it is difficult to walk along the footpaths because these, too, are used as additional parking space by the owners and customers of the adjacent shops. The air is filled with exhaust fumes and the sound of motor horns; when the traffic does move, the noise level increases with the sound of badly tuned engines and defective silencers.

Private cars, many carrying only the driver, some chauffeur-driven with a single passenger in the rear seat, and others carrying more than they were designed to, are interspersed with taxis whose drivers are particularly aggressive in their attempts to maximise their earnings; all taxis seem to be occupied, and potential passengers peer anxiously at each in the hope of finding one available for hire.

Drivers are irritable and impatient, and have little consideration for one another or for pedestrians; some have had to park long distances from their places of work, and have struggled along crowded pavements to find their cars; some were obstructed by other inconsiderate drivers who had double-parked, requiring much use of the horn before the offending vehicles were moved. Motor cycles weave noisily between the cars, intimidating pedestrians who are attempting to cross the road.

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There are long, undisciplined queues at the bus stops. There are two kinds of bus: large single-deckers with two doors, and smaller “minibuses” with about twelve seats. All are disreputable, old, shabby, badly maintained, and unreliable. All are crowded: the larger buses have over 100 passengers on board, mostly standing, and several clinging precariously to handrails in the doorways. The minibuses have up to twenty passengers crushed into their twelve seats, and some passengers crouching between the seats: there is insufficient headroom to stand upright. The passengers at the bus stops rush at each bus as it approaches, and some manage to squeeze aboard, often gaining only a toehold on the step and a finger-hold on the handrail. The majority must wait for the next bus to arrive; there is no means of knowing when that will be, or whether it will have room for them.

It will be several hours before all passengers reach their homes, and many will have to walk for thirty minutes or more after leaving the bus. Passengers complain bitterly about the irregular bus service and about the buses themselves. They grumble that the bus owners have no consideration for passengers’ safety, comfort or convenience, and charge excessive fares, which they can barely afford. Bus drivers drive dangerously, and race each other to the stops for passengers. The conductors are rude and unhelpful, and cheat the passengers whenever they can; some of them refuse to let schoolchildren board their buses, since they pay lower fares than adults. Many passengers have to transfer more than once from one bus to another during the course of their journeys, suffering yet another long wait and another scramble for a place. The buses frequently break down, but there is rarely a relief vehicle, and the stranded passengers must wait for another bus with the capacity to take them; fares are rarely refunded in these circumstances. Passengers are vulnerable to pickpockets, and may even occasionally experience armed robbery. They certainly do not feel they are getting value for their money; but this is the way things are, and the majority have long been resigned to the situation.

This illustration may seem over-dramatised to those unfamiliar with the problems of developing countries. But it is typical of large cities in many parts of the world. It is depressing; but even more depressing is the fact that in many cities these problems are worsening by the day. More cars are appearing on the road, increasing congestion further. There are increasing numbers of bus passengers requiring transport, but the supply of buses does not keep up: in fact the number of buses in service is declining in many cases, as vehicles wear out and insufficient funds are available for their replacement. As city populations increase, so does the size of the cities, and people have to travel even greater distances from home to work.

Not all of the problems described are experienced in every city, but many of them are common to all. Different, but often equally unpalatable problems, are experienced by long-distance and rural travellers. It is difficult to quantify them all; but it is a fact that this kind of situation hinders development and contributes to a poor quality of life. However, as this book sets out to demonstrate, measures can be taken to improve matters, within the financial capabilities of most developing countries, provided there is commitment on the part of everybody concerned.

## **THE ROLE OF PUBLIC TRANSPORT IN DEVELOPING COUNTRIES**

Civilised life depends on transport, for the movement of goods from where they are produced to where they are needed, and for the movement of people from their places of residence to where they must go to pursue all the activities of life, such as work, education, shopping and leisure activities. A good transport system is vital to a country's development; at the same time the factors affecting the development of a country play an important part in determining the way in which its transport system evolves. Ensuring that the transport system develops in the way which is most conducive to the overall development of the country can have far-reaching benefits, and conversely, failing to do so will have an adverse effect on development.

Passenger transport is required to move people from one place to another, and requirements vary considerably between different places and between different social groups. In some areas people travel in large numbers at the same time; in others there are few people, who travel infrequently. There are people who travel daily to and from their places of employment, and there are those who use public transport less frequently, for example as a means of carrying their produce to market. There are some people who can afford cars, and at the other end of the scale there are those who can barely afford the most basic form of transport.

Populations in most developing countries are increasing much faster than car ownership levels, and therefore an increasing proportion of the population is dependent on public transport except for very short journeys. In most countries, walking is the most common mode of travel for distances of up to one or two kilometres in urban areas, and much farther in rural areas; those who own bicycles tend to use them for journeys of up to about eight kilometres, beyond which public transport is the preferred mode. Public transport also provides an alternative to those who have private transport, but are sometimes deterred from using it by traffic congestion, parking difficulties or problems in accessing certain streets, although in practice it is relatively unusual, particularly in developing countries, for car owners to use public transport to any significant extent. However, in many developing countries families tend to be large, so that even if there is a car belonging to a household, most members of the family are still likely to use public transport for at least some of their travel.

Public transport is therefore vital for the vast majority without access to private transport. There is need for personal mobility, in particular for access to employment opportunities, but with low income levels affordability is a common problem, while the services provided are often regarded as inadequate.

Most of the transport problems experienced in developing countries are similar to those found everywhere in the world, although there may be significant differences in magnitude, while some are peculiar to developing countries. In most western countries, demand for public transport, and therefore the level of service provided, have declined as car ownership has