Contents

Pref	ace	viii
Chaj	pter 1 Transport and Economics	1
1.1	Transport economists	1
1.2	The economic characteristics of transport	4
1.3	Some statistics	6
1.4	The framework of the book	12
1.5	Further reading and references	14
Chaj	pter 2 Movement, Transport and Location	16
2.1	The desire for movement	16
2.2	The 'chicken or egg' problem	18
2.3	Transport and industrial location	21
2.4	Output, market area and transport costs	27
2.5	Urban transport and land values	31
2.6	Transport and urban wage rates	37
2.7	Further reading and references	39
Cha	pter 3 The Demand for Transport	43
3.1	The demand for transport	43
3.2	What factors influence demand?	44
3.3	The notion of a 'need' for transport	55
3.4	The valuation of travel time savings	58
3.5	The demand for car ownership	65
3.6	Further reading and references	69
Cha	pter 4 The Direct Costs of Transport	74
4.1	The supply of transport	74
4.2	Fixed and variable costs	77
4.3	Specific, joint and common costs	88
4.4	Problems of common cost allocation – the road and rail	
	track cases	90

vi Transport Economics

4.5	Transport user costs - the notion of generalised costs	97 99
4.6	Perceived or resource costs?	
4.7	Some criticisms of the generalised cost concept	102
4.8	Further reading and references	103
Chap		107
	Transport	107
5.1	What is an externality?	107
5.2	Transport and the environment	109
5.3	The magnitude of the environmental problem	111
5.4	Introduction to traffic congestion	120
5.5	The economic costs of congestion	123
5.6	Types of traffic congestion	125
5.7	The economic value of congestion	128
5.8	Further reading and references	130
Chap	ter 6 The Pricing of Transport Services	133
6.1	The principles of pricing	133
6.2	Marginal cost pricing	138
6.3	Difficulties of 'second best' situations	141
6.4	Price discrimination	145
6.5	Pricing with stochastic demand	152
6.6	The problem of the peak	154
6.7	Transport subsidies, operational objectives and pricing	160
6.8	Further reading and references	162
Chap	oter 7 The Containment of the External Effects of	
-	Transport	165
7.1	Introduction	165
7.2	The 'polluter pays' principle	166
7.3	Congestion charges - theory and practice	170
7.4	Emissions standards	178
7.5	Transport subsidies and the environment	182
7.6	Protecting the sufferers	185
7.7	Some conclusions	187
7.8	Further reading and references	189
Char	oter 8 Investment Criteria – Private and Public Sector	
	Analysis	192
8.1	Basic principles	192

8.2	The discounting formulae – the commercial and social	104
•	approaches	194
8.3	The theory of cost-benefit analysis	197 202
8.4	CBA and network effects	202
8.5	CBA in practice and variations on the theme	203
8.6	Comparability ratios	212
8.7	The adjustment to price approach	214
8.8	Assessing the effect on national income	218
8.9	Comparability in practice – UK inter-urban transport	218
8.ÍO	Further reading and references	219
Chap	ter 9 Transport Planning and Forecasting	223
9.1	The development of transport planning	223
9.2	The theory of transport planning	226
9.3	Modelling and forecasting travel demand	231
9.4	Sequential travel demand forecasting	232
9.5	Disaggregate modelling	238
9.6	Interactive modelling	241
9.7	Further reading and references	243
Chap	ter 10 Transport and Economic Development	245
10.1	Transport and economic development	245
10.2	Transport economics in less developed countries	248
10.3	EEC transport policy	255
10.4	Transport and regional development	258
10.5	Transport, urban development and redevelopment	261
10.6	Further reading and references	268
Chap	ter 11 Economics and Transport Policy	271
11.1	The reasons for government intervention and the	
	methods employed	271
11.2	Priorities in transport policy	275
11.3	Co-ordination via the market, or by direction?	281
11.4	Further reading and references	284
Index	¢	287