

Contents

Introduction: Diversity and Evolution of Urban Mobility Systems.	xiii
Gaële LESTEVEN	
Part 1. Urban Mobility and Socio-Economic Characteristics	1
Chapter 1. Getting Around the City: Overview of Urban Mobility Around the World	3
Gaële LESTEVEN	
1.1. Describing urban mobility systems	3
1.1.1. Definitions	3
1.1.2. Population growth and urban transition	5
1.1.3. Mobility and urban forms	6
1.1.4. Social trends	8
1.2. Observing urban mobility	9
1.2.1. Household equipment and personal mobility.	9
1.2.2. A diversity of modal share.	10
1.3. Modes of transport: areas of relevance, urban planning and local policies.	13
1.3.1. The predominance of private cars	13
1.3.2. High urban density and public transport.	15
1.3.3. Active transport in the heart of the city	17
1.4. Conclusion	18
1.5. References	19

Chapter 2. Unevenly Distributed Mobility, Spotlight on Brazil	23
Benjamin MOTTE-BAUMVOL	
2.1. Introduction.	23
2.2. Income and access to the automobile, main determinants of low mobility	24
2.2.1. Decreasing inequalities of motorization.	24
2.2.2. Decoupling of motorization and automotive mobility	25
2.2.3. Automobile dependency as a source of inequalities.	26
2.3. Low mobility as a source of exclusion	27
2.4. The effects of accessibility and low densities.	28
2.5. Room for maneuver with respect to <i>transport poverty</i>	29
2.6. In Brazil, increased inequality and <i>transport poverty</i> ?	32
2.6.1. Low mobility, a question of measurement?.	32
2.6.2. With motorization, inequalities in mobility increase	33
2.6.3. Slow public transport.	34
2.6.4. Geographical confinement.	35
2.6.5. Highly mobile poor neighborhoods	36
2.7. Conclusion	37
2.8. References	37
Chapter 3. Going Out Without Getting By? Mobility and Poverty in Dakar	45
Lourdes DIAZ OLVERA, Didier PLAT and Pascal POCHE	
3.1. Field and tools	46
3.2. Who are the poor?	48
3.3. A specific mobility in situations of poverty	50
3.3.1. Essential mobility	50
3.3.2. Costly mobility	51
3.3.3. Local mobility	53
3.4. Going to study: degraded conditions of access to institutions	55
3.5. Shopping for food: a little further, a little less easy	57
3.6. Living in the outskirts, working in the neighborhood instead of downtown Dakar	59
3.7. Restricted access to the city	62
3.8. Conclusion	63
3.9. References	64

Chapter 4. Children’s Mobility: Comparative Perspectives Between France and Quebec	67
Sylvanie GODILLON	
4.1. Introduction.	67
4.2. Children as mainly passengers in individual motorized modes	68
4.2.1. School as structuring family organization.	68
4.2.2. The predominance of motorized modes for getting to school	69
4.2.3. Walking and cycling, modes used less and less	71
4.3. Important health, safety and environmental issues.	71
4.3.1. Physical inactivity impacts children’s health.	71
4.3.2. Parental fears of accidents and assaults	72
4.3.3. A difficult but necessary change faced with climate issues	74
4.4. Actions to encourage modal change for daily mobility	74
4.4.1. Organizing accompaniment of children on foot	75
4.4.2. Pedestrianizing the streets around schools	76
4.4.3. Developing children’s cycling skills	77
4.5. Conclusion	78
4.6. References	78
 Part 2. Urban Public Transport	 83
 Chapter 5. Mobility, Public Transportation and Super-Aging in Japan	 85
Sophie BUHNIK	
5.1. Introduction: Japan or the efficiency of urban transport faced with super-aging	85
5.2. Geographies of super-aging in Japan and their influence on public transport networks and daily mobilities.	88
5.2.1. The deepening depopulation of Japan’s peripheries.	88
5.2.2. An aging of suburban fringes reinforced by changes in residential preferences	90
5.3. The influence of passengers’ sociodemographic characteristics and location on transportation reconfigurations	93
5.3.1. Changes in rail traffic: key figures and explanations	93
5.3.2. Unpacking the factors behind the rise in motorization rates in aging and shrinking Japan	96

5.4. Seniors' exposure to urban decline and the changing role of station neighborhoods in aging agglomerations	97
5.4.1. Attachment to station neighborhoods tested by the decline in rail traffic and commercial devitalization	97
5.4.2. Between automobile dependence and new places of sociability for senior suburban households	99
5.4.3. Questioning the present and future strategies of railway companies	101
5.5. Maintaining accessibility in aging cities and regions: transport policies at the crossroads of care and local autonomy	103
5.5.1. Integration of public and private actors in compact city policies	104
5.5.2. Institutionalization of volunteering to curb the shrinkage of transport.	107
5.6. Conclusion	108
5.7. References	109

Chapter 6. From Calcutta to Delhi and Hyderabad: Genealogy of Indian Metros

B er enice BON

6.1. Introduction.	113
6.2. The first metro in Calcutta: jewel for rail engineers, burden for urban policies	114
6.2.1. The birth of the Calcutta metro: emerging urban transport policies across India	115
6.2.2. The Calcutta metro, jewel of railway engineers	118
6.3. Construction of a political and technical model around the Delhi metro	119
6.3.1. Delhi, capital of India and center of experimentation for major urban projects	120
6.3.2. National sectoral reforms, a favorable context for metros at local level.	122
6.3.3. Building a metro but also a political and technical model	123
6.4. Private firms and regional states: counterweights to the Delhi metro model	126
6.4.1. The controversial arrangements of the Hyderabad metro.	127
6.4.2. Mumbai's hybrid model	129
6.5. Conclusion	131
6.6. References	132

Chapter 7. Non-Centralized Urban Transport: An Illustration Based on the Case of Jakarta	135
Rémi DESMOULIÈRE	
7.1. Introduction.	135
7.2. Words and things: terminological issues.	137
7.2.1. Paratransit, a functional approach	137
7.2.2. Informal transport and artisanal transport: from the socioeconomic to the political	140
7.2.3. Centralization, decentralization and non-centralization.	142
7.3. Operating and controlling non-centralized transport.	143
7.3.1. Fragmented structures of operation	143
7.3.2. The ambivalent role of public authorities	145
7.3.3. Intermediary organizations: popular companies or cartels?	147
7.4. What place for non-centralized transport in contemporary metropolises?	149
7.4.1. “Gearboxes for metropolization?” Questions of flexibility and adaptability	149
7.4.2. Integration of non-centralized transport: experiences and sticking points	152
7.5. Conclusion	153
7.6. References	154
Part 3. Active Modes of Transport and Infrastructure Policies	157
Chapter 8. The Infrastructure of Walking: The Case of Mexico City Sidewalks	159
Ruth PÉREZ LÓPEZ, Jérôme MONNET and Guénola CAPRON	
8.1. Introduction: sidewalks, a special element of urban pedestrian infrastructure.	159
8.2. In Mexico City, the place of walking in the mobility system reflects social inequalities	161
8.3. The social and material production of sidewalks: methodology	165
8.4. The diversity of sidewalk functions	166
8.5. Competition and conflict between sidewalk uses.	169
8.6. From uses to actors’ games: the production of a negotiated order.	172

8.7. Conclusion: Towards inclusive and adaptive sidewalk layouts?	176
8.8. References	177

Chapter 9. Cycling Policies in Europe: The Case of Greater Lyon and Hamburg 181

Manon ESKENAZI

9.1. Introduction.	181
9.2. Cycling infrastructure at the heart of cycling policies	183
9.3. Hamburg: cycling planning to support the development of practices	184
9.3.1. Integrating cycling into the urban strategy of the sustainable city: the carrot-without-the-stick approach.	185
9.3.2. Cycling infrastructure at the heart of cycling strategy	187
9.3.3. Cycling services to build intermodality	189
9.4. Greater Lyon: relaunching practice through policies, a missed bet?	191
9.4.1. A cycling policy of plans	191
9.4.2. Infrastructure and services as the pillars of public cycling action	194
9.5. Conclusion	197
9.6. References	199

Part 4. Circulation of Urban Mobility Analysis Tools and Public Policy Models 203

Chapter 10. Categorical Pitfalls for Analyzing Urban Mobility 205

Hadrien COMMENGES and Florent LE NÉCHET

10.1. Introduction	205
10.2. Which type of data for analyzing urban mobility?	207
10.2.1. Typology of mobility data	207
10.2.2. From local surveys to attempts at international harmonization	211
10.3. Which objects describe mobility?	213
10.3.1. The trip	213
10.3.2. The mode of transport	215
10.3.3. The city	218

10.4. Categorical pitfalls: balancing diversity and comparability	223
10.4.1. The category of transport: modes and purposes for travel	224
10.4.2. Temporal categories: the typical working day	227
10.4.3. The spatial category: local urban systems	228
10.4.4. Categories reconstructed for harmonization: ad hoc mechanisms	231
10.5. Discussion.	233
10.6. References.	234

Chapter 11. Geographical Inequalities in the Analysis of Urban Mobility.

Florent LE NÉCHET	243
11.1. Introduction	243
11.2. Analysis of the implementation of CEREMA-type surveys in France	245
11.3. Size effects and context effects explaining why an HTS is carried out	248
11.4. Bibliometric analysis of research on urban mobility	251
11.5. Global heterogeneity of urban mobility analysis	253
11.6. Thematic specializations revealing issues for local action on mobility	257
11.7. Discussion.	259
11.8. References.	260

Chapter 12. Circulation of Models in Africa: The Example of Bus Rapid Transit in Cape Town.

Solène BAFFI	265
12.1. Introduction	265
12.2. The diffusion of BRT in Africa	266
12.2.1. Diffusion of an efficient transport model as a planning and urban planning tool	266
12.2.2. Stakeholders supporting this model	268
12.2.3. Limits of the circulation of the model in Africa	270
12.3. South Africa, laboratory for urban mobility projects.	272
12.3.1. A long-awaited reform	272
12.3.2. BRT: symbol of post-apartheid South Africa	275
12.3.3. The Capetonian version of the BRT project: MyCiti	276

12.4. Between strong appropriation and poor adaptation, MyCiti's mixed record.	279
12.4.1. An international model reappropriated to assert local power	279
12.4.2. A project ill-suited to South African specificities	280
12.4.3. Feedback effects at different levels.	282
12.5. Conclusion	284
12.6. References.	285
List of Authors	291
Index	293