

INSTITUTIONAL INITIATIVES IN THE DEVELOPING WORLD: A REVIEW OF THE 1990s

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ABSTRACT

This paper draws on work undertaken by the author in 2000 for the CODATU organisation, which required the review of over fifty papers concerned with institutional change in urban transport in the developing world. The need for institutional change in developing countries was a strong theme throughout the literature.

Barat (1990) considers the institutional planning frameworks in Third World cities to have three elements: organisations, procedures and resources. According to Barat's model, these are guided by a management and control structure and by planning philosophy, procedures and techniques. This paper begins with a brief introduction discussing the importance of institutional issues in urban transport, and then describes Barat's model of institutional planning frameworks. The paper goes on to review the literature on institutional development in the developing world which has either identified common problem areas, or which has highlighted some successes. Some of the interesting themes to emerge from this literature review are the widespread calls for institutional integration; the high profile given in the literature to human resources development; the recognition of the political nature of transport decision-making; the need for a fresh emphasis on low-cost solutions; and the apparent inappropriateness of current planning techniques. Using this literature review, it has been possible to draw some conclusions for South Africa on imperatives for institutional change.

1. INTRODUCTION

In a review of twelve cities in Sub-Saharan Africa undertaken for the World Bank and the United Nations, Bultynck (1992) noted weaknesses or non-existence of supervisory and co-ordinating structures in the urban transport sector. Subsequently the World Bank have given a high profile to institutional reform in projects they have undertaken in Pusan, India (Bajpai and Hong, 1996) and in Ghana (Kwakye and Fouracre, 1996 and 1998). Vasconcellos (1996) views institutional issues as one of the key problems facing the development of urban transport and De Saint Laurent (1998) says that what South Africa needs is an 'institutional breakthrough'.

In this paper the notion of Institutional Planning Frameworks (IPFs) is explored. In Section 2 a definition of Institutional Planning Frameworks developed by Barat (1990) is presented, and the issue of success and failure in IPFs is discussed in Section 3. A series of developing world examples are presented in Section 4 and finally, in Section 5 conclusions are drawn.

2. DEFINING INSTITUTIONAL PLANNING FRAMEWORKS

Transport planning is not undertaken in isolation from other activities. Many agencies are involved and it is these organisations or individuals, plus the formal or informal linkages between them, which constitute an Institutional Planning Framework (IPF). The IPF can be viewed as having three parts: *organisations, procedures and resources*, which are co-ordinated by a linking *management structure and guided by planning philosophies, procedures and techniques*. *Organisations* would include the national, provincial and local authority authorities, but also the transport operators and user groups. The legal and regulatory systems which guide transport operations are *procedures* of the IPF. These can be at many different levels: national, regional or local. Organisations can call on *resources* principally in the form of funding, or human capital. These components of the IPF are illustrated in Figure 1, below.

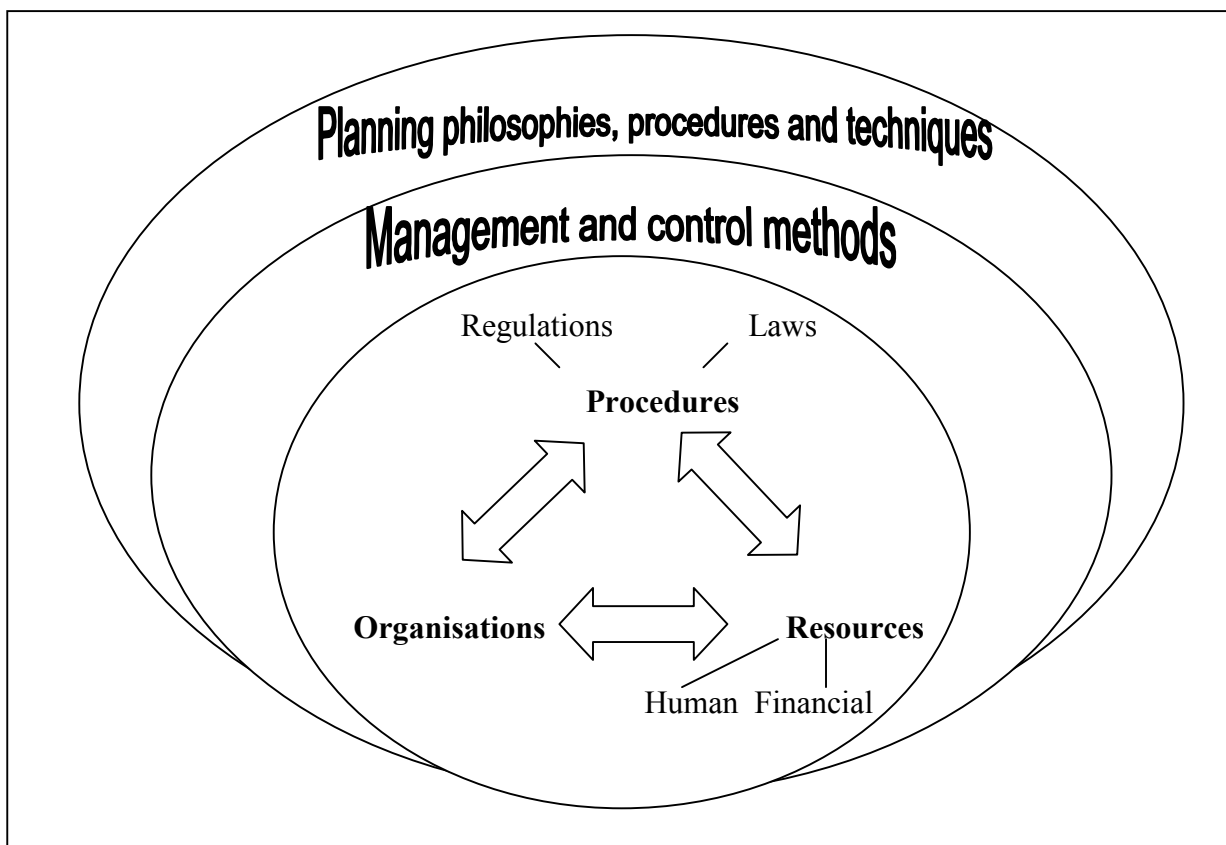


Figure 1: Components of the Institutional Planning Framework. (Adapted from Figure 7.1 of Barat, 1990)

3. SUCCESS AND FAILURE IN IPFs

A review of over fifty papers from international conferences, journals or books, concerned with institutions in the developing world (Kane, 2000) found very few examples of 'success' in institutional planning frameworks. Generally the papers which do focus on non-technological issues concentrate on problems which have been found. Others have generalised their experiences and have identified what, in their view, is needed to enable improvements in urban transport. Dimitriou (1990b, p.383) talks of a new 'developmental' approach to transport planning, and gives a number of guidelines for planners to follow in order to achieve it. It is clear that Dimitriou considers these guidelines to be prerequisites for successful urban transport. Vasconcellos (1996) identifies principles which he believes have driven urban transport planning to date, and then

suggests four alternative principles: accountability of the process; social progressiveness, that is, a system which detects and fills accessibility and equity gaps; equitable appropriation of space and sustainability. Again, one can assume that a system in which these assumptions are fully addressed would be deemed successful by Vasconcellos. It is clear from a comparison of these two examples that different individuals will each have a different idea of what 'success' means, and that, fundamentally, the transport planning exercise is a subjective one, where the underlying values of those involved will surface in the policies and projects which they adopt. If one accepts that transport planning is a subjective exercise, then it is impossible to derive one definition of success, since 'success' will be as variable as the belief-systems are in the developing world. Successful practice in Mumbai, for example, may seem very inappropriate in Mexico City. Despite the lack of consensus on what success means, the articles reviewed for this paper found that it *is* possible to identify features of the urban transport system which are *commonly considered by authors to be worthy of change*. Hence, it has been possible to identify from case studies some common themes which probably have some local relevance in South Africa, given the pool of common experiences shared by the planners of urban transport in developing countries.

4. INSTITUTIONAL PLANNING FRAMEWORK INITIATIVES IN THE DEVELOPING WORLD

Due to space constraints it is not possible in this paper to discuss case studies for all elements of Barat's Institutional Planning Framework model. The focus in this section is on the aspects which are less frequently discussed in the literature, that is: organisations; resources of human capacity; management and control; and planning philosophy, procedures and techniques. The issues of IPF procedure and of funding resources are covered elsewhere (Kane, 2000).

4.1 Organisations

Calls for organisational change in the literature reviewed are largely in response *to widespread fragmentation in the functions and roles of agencies responsible for transport*, and the apparent lack of co-ordination between those agencies. This was particularly evident in Africa (Fouracre et al, 1994; Kwakye, 1995; Bultynck, 1992). In India (Datta, 1998; Kulkarni, 1998; Khare and Agarwal, 1998) Datta noted some cities with 10-15 agencies having urban transport responsibility and the urban transport situation was described as reaching crisis proportions. Fragmentation of urban administration was also noted in a review of Latin America's mega-cities (Figuroa, 1996). There are two main proposals in the literature: for greater co-ordination of agencies; and for decentralisation of responsibilities. These are dealt with separately below.

The recognition of the fragmented organisational arrangement in many developing countries, and the need for greater co-operation, is not new. In Caracas, for example, a single metropolitan transport authority was proposed by consultants in 1976, but has yet to be implemented, despite the seeming necessity of it (Boccalandro et al, 1996). Elsewhere in Latin America there have been difficulties in implementing single Transport Authorities, due to political constraints in Buenos Aires (Turco and Arcusin, 1998) and due to lack of agreement between local authorities in Rio de Janeiro (Ratton Neto, 1998). Despite these difficulties, *the call for co-ordinated metropolitan Transport Authorities is widespread* (Goel and Gupta, 1996; Victor, 1996; Rivasplata, 1996; Bultynck, 1998; Mitric, 1994). In South Africa the development of new Transport Authorities has been described as a 'key challenge'. (Walters, 1998) and is a major principle embedded in the most recent transport legislation.

A metropolitan Transport Authority implies some level of *decentralisation of functions*, but the UNCHS, are specific in their reference to this. They promote that urban transport decision-making should be decentralised to the local level, as a means of ensuring that all urban residents are adequately served by effective transport services at affordable prices (Williams, 1998). Vasconcellos (1996) notes that excessive centralisation of powers in developing countries can hinder local authority decision-making, and this is demonstrated in Cairo where a strong central state has apparently conspired against local level implementation (Mitric, 1994).

So *what would these decentralised, unified Transport Authorities look like?* Victor (1996) suggests that they should follow French and German models of structure. Rivasplata, referring to Santiago (1996); Walters, referring to South Africa (1998); Agarwal, referring to Indian cities (2000) and Williams (1998), referring to UNCHS policy, all suggest a model which separates an elected, representative political body - who define goals and ask fundamental questions about policy direction - from an executive body who manage the implementation of the decisions. The executive would comprise of employees, or sub-contractors, to the authority, with specialist knowledge and it would be their responsibility to define the product or service most capable of implementing the goals of the elected body. Walters (1998) defines the elected body as 'strategic' and the executive body as 'tactical'.

Case studies of fully functioning and successful transport authorities as described above were not generally evident in the literature. Nevertheless, there appear to have been some moves towards co-ordination in many countries. These vary widely in their scope and level of apparent success but two themes are evident: *the development of specialist units, often comprising professionals and interested employees of state; and the instigation of inter-ministerial or inter-sectoral committees.* In the well known Curitiba example the IPPUC (Curitiba Research and Planning Institute) is a technical group of local planners, architects and engineers who have effectively influenced the development of the public transport system there (Rabinovitch and Hoehn, 1995). Similarly, the World Bank supported Urban Transport Project in Ghana initiated the professional Urban Transport Unit to help move that project forward (Kwakye and Fouracre, 1996) and Buenos Aires has a Metropolitan Transport Unit to oversee some of the roles which a Transport Authority would undertake (Turco and Arcusin, 1998). Meanwhile in South Africa there are technical committees at metropolitan, provincial and national levels (Chinnappen and Hugo, 2000).

In Ghana the technical committees preceded the development of committees of political representatives. Ghana now has inter-ministerial committees in place (Kwakye and Fouracre, 1996; Kwakye et al, 1997); inter-sectoral committees have been developed and urban transport policy, regulation and execution issues are now under one minister. Buenos Aires also has political committees looking at urban transport issues at the three levels of government (Boccalandro et al, 1996), as does South Africa (Chinnappen and Hugo, 2000).

In summary we can conclude that:

- there are widespread calls for organisational change, and particularly for greater co-ordination between, and integration of, agencies for urban issues.
- many suggest decentralised transport authorities should be adopted, but examples of these are not generally evident.
- however, there *are* clear practical moves towards political and technical liaison in several countries.

4.2 Human Capacity Resources

The particular importance of building human capacity for the improvement of IPFs is mentioned several times in the papers reviewed, and is noted as a specific lesson which has been learned from the Sub-Saharan Africa Transport Policy Program, which is aimed at improving transport sector performance (Bultynck, 1998). Bultynck notes that in order to improve the urban transport system through sector policy reform, the establishing of an institutional and regulatory framework is absolutely necessary if any developments are to be sustained, and these changes require a strengthening of local expertise. In an earlier review of twelve Sub Saharan states he noted that one of the traits for success was “continual and systematic” training, controlled by government. (Bultynck, 1992). Ghana is one country which is participating in the SSATP, and the findings there confirm the overall conclusions reached by Bultynck. In the earliest days of the urban transport development work there, two requirements were determined for the successful operation of public transport: the creation of a professional cadre at local and central levels, and qualified staff to maintain this cadre. (Fouracre et al, 1994). In this regard, two staff have been sent overseas for post-graduate training, there have been secondments, attendance at conferences and seminars, and short courses for all local technical staff have been considered. (Kwakye and Fouracre, 1996). It is not only in the SSATP that the importance of human capacity development has been noted. In Buenos Aires the development of a new institutional approach to co-ordinated transport included as an important component the development of core groups of technical skills (Turco and Arcusin, 1998). Dimitriou (1990) noted the need to enhance local government capabilities through specialist training in Indonesia in order for successful project implementation, and in Lae City Puvanachandran (1996) saw the need for much more attention needed for staff training. In Nigeria also, the government has responded to management problems in mass transit by introducing training and guidelines for operators. (Bolade, 1998).

One current theme is a *focus on the training of local staff, and the criticism of the use of international consultants*. Consultants’ planning and policy studies in Ghana were said to be too numerous, with too obvious conclusions and unrealistic recommendations. Expatriate input was found to be expensive and perhaps only temporarily effective, unless it was systematically transferred to local staff (Kwakye and Fouracre, 1996). Overall, the SSATP has suggested that expatriate advisors should act as ad-hoc facilitators and advisors only and that there needs to be ownership by local staff, and targeted training if the use of expatriates is to be worthwhile. (Bultynck, 1998). Puvanachandran, discussing the case of Lae City in Papua New Guinea agrees that local staff should be the primary agents for change, and that if consultancy services are used, then they should not conclude at a final report or plan, but rather should cover short to medium term implementation. (Puvanachandran, 1996).

Lack of appropriate training is also evident on the ground, with an emphasis on large projects and the parallel neglect of smaller, low-cost initiatives. De Saint-Laurent (1998), in a review of South African urban transport sees the lack of low-cost well prepared field tests as one key concern, and the need for a renewed focus on low-cost measures is also raised in India (Bandopadhyaya, 1996; Datta, 1998). Given the crisis in funding in developing countries, and the relatively large benefits possible from low-cost measures, it is then pertinent to ask why the use of low-cost measures has failed to become more widespread. Mitric provides some useful evidence on this matter in his review of experience in Cairo (1994). In the early 1980s the World Bank initiated an unusual urban transport programme (for that time) in Cairo, mainly consisting of low-cost measures. A review of experience since then indicates that Cairo went in the opposite direction, towards metro and road construction. It is suggested by Mitric that there were several reasons for the inconsistency between the technical advice given and the actual action taken. One reason was the small amount of

institutional capacity available to undertake lower-cost improvements. Developing countries are almost forced towards large-scale investment due to insufficient understanding about how to design, implement and maintain low-cost measures on behalf of the local staff. This is not a problem unique to developing countries, however. A recent UK report identified that "a significant number of those involved in transport planning still viewed their tasks in the formal teams which have been the hallmark of much of the engineering input to the profession – on the one hand, big projects, and on the other, formal equilibrium modelling" (Chisholm, 2000). A further hypothesis for the lack of low-cost measures implemented is that they are not prestigious enough for political support. Mitric argues that both the political and institutional issues need more consideration.

In summary, we can conclude that :

- The development of local human capacity in urban transport institutions, through targeted training, is vital.
- Low-cost measures are worthy of increased attention, but this may require specialised training.

4.3 Management and Control

Management and control of the IPF is an issue which cuts across organisations, procedures and resources. In a democracy there is the need for an official body working in conjunction with elected members, using some planning process. Issues associated with the elected members are discussed in this section. The matter of planning process is discussed in the following section.

A number of authors have noted *the importance of the political dimension of transport planning*, that is, the need to take note of differences in and the influence of power, both in the developed world (Ahlstrand, 1998; Goetz and Sczyliowicz, 1997; Gomez-Ibanez, 1996; Johnston et al, 1988; Kain, 1990; Meyer and Miller, 1984 and Wachs, 1995) and in the developing world (Kwakye, 1995; Puvanachandran, 1996 and Vasconcellos, 1996). The consensus in this work is that transportation planning is an inherently political exercise, and that ignoring the political dimension is perilous and unlikely to lead to success in the long run. Vasconcellos notes that the political aspects are perhaps even more important to consider in developing countries than elsewhere, due to the 'fragile' nature of democratic processes in those countries. In the developing world, he argues, political representation mechanisms are not strong, and decision-making processes are dominated by an essentially middle-class elite, who make decisions favouring themselves. Given the apparent importance of politics in transport, the literature used in this study was examined for examples where policy and political aspects have contributed to notable success and failure, and these are described below.

Several writers noted the need for a concrete, clearly articulated and well communicated set of policy goals for developing countries (Bolade, 1998; Bultynck, 1992 and 1998; Dimitriou, 1990 and Krynauw and Anderson, 2000). Generally however, even where policies were in place, there was often *a lack of political will* for their implementation, or else the policy changed too frequently for it to be effectively implementable. This again is well documented by those writing of the Indian context (Bhatnagar, 1996; Datta, 1998; Kulkarni, 1998). Lack of political will to implement policy was also evident in Caracas (Boccalandro et al, 1996) and is discussed by Mitric in the case of Cairo (1994).

Political will to implement policy is noted as a key success factor in the Curitiba case described above and in the 'Arrive Alive' case here in South Africa (Chinnappen and Hugo, 2000). In Faisalabad, Pakistan, a prime-ministerial visit and a strong local leader helped to overcome a system which had previously stalled in attempts to improve public transport. This political intervention led to the formation of a Non-Governmental Organisation which was charged with changing the

public transport system. To date the system has demonstrated some notable improvements. (Abbas Anjum and Russell, 1997 and Russell and Abbas Anjum, 1998).

Other case studies suggest that unless *all key role players are involved with the transport planning decision-making process* then there are likely to be problems. In 1998 De Saint Laurent warned that decision-makers need to be more firmly involved if the 'remarkable' Moving South Africa policy initiative was not to be shelved. This was re-iterated by Krynauw and Anderson, again in the South African context. Kunaka (1996) notes that for developing countries generally, both users, non-users, operators and government need involvement. Inclusivity in the decision-making process is also called for in Ghana, where policy development without the involvement of the transport trade unions is considered futile, due to the power they have over the public transport terminal buildings and organisation (Fouracre et al, 1994).

Although political issues were often noted in the literature as important, *methods for dealing with politicians or key role players, were very limited*. One interesting approach was demonstrated by Villegas Lopez (2000) in Mexico City. In evaluating a status quo and policy alternative, the writer compares economic costs and benefits; financial feasibility and then political feasibility, that is the likelihood of interested parties (such as federal government, motorists, motor industry, opposition parties, environmental activists and others) to agree or disagree with the proposed policy alternatives. The conclusion to Villegas Lopez's work is that, despite the apparent attractiveness of the policy alternative, the status quo scenario is the most politically acceptable, and so it stands.

In summary, we can conclude that :

- urban transport planning is an inherently political exercise, and this needs to be accounted for in the planning process.
- lack of political will can be a problem, and so consensus building and participation strategies form a key part of the planning process.

4.4 Planning philosophy, procedures and techniques

A widely quoted example of 'success' is Curitiba (Rabinovitch and Hoehn, 1995). It is interesting to note that in addition to a clearly articulated policy framework, policy development in Curitiba follows an unusual pattern which is in contrast to the traditional approaches of transport planning. Problem solving is seen in Curitiba to be a continuous process, rather than a one-off plan or policy framework. It is accepted that small incremental changes can, over the longer term, bring about large changes, and so the process of policy making and project adoption is one of 'trial-and-error'. Proposals are made, the ideas are tested at a conceptual level and then applied in the field. Feedback and monitoring from the application is then used to assess the success of the intervention. The Curitiba model of planning also recognises financial constraints early in the planning process and the need for planning which explicitly spell out fund requirements are also called for elsewhere (Datta, 1998; Rivasplata, 1996).

Traditional methods of transport planning have tended to neglect funding matters, relegating them to one aspect of an evaluation framework, which usually comes towards the end of the planning process. In practice this can lead to a lot of wasted effort by transport planners, designing projects or schemes which are bound for failure due to lack of available resources. Generally speaking transport planning approaches have been imported from the developed world, and have been implemented with some refinement for local conditions. However, *a number of authors have questioned the validity of using this approach*. Dimitriou (1990) is a particularly vocal opponent, and says *that conventional approaches to transport planning are inappropriate to Third World countries*, and part of the reason for this is the lack of institutional resources for planning, co-

ordination and management. Vasconcellos criticises conventional approaches for being unreasonable in a Third World context (1996), and that a lack of reliable data can lead to 'absurd' results. He notes that the approaches were invented and adjusted mainly for European and North American conditions, which are dominated by considerations of accommodating the car, in an environment of high car ownership. Others have similarly criticised the application of conventional planning techniques to the developing world context. (Thomson, 1983 cited in Atkins, 1986; Kane, 1998; Khisty, 1993).

In summary, we can conclude that :

- Policy goals need to be concrete, clear, well communicated, and adapted through an on-going monitoring process.
- There are few existing guidelines to help transport planners achieve effective political and community participation in the transport planning process, or to assist them in the formulation of clear planning goals.
- More generally, conventional planning processes are inappropriate to developing world conditions and need to be re-evaluated.

5. IMPLICATIONS FOR SOUTH AFRICAN DEVELOPMENTS

Have South African planners learnt from their counterparts elsewhere? South African planners have made progress in areas where other developing countries have struggled, but there still appear to be some lessons to be learnt. Looking to the future, there may be benefit in focusing on the use of smaller, low-cost traffic engineering measures for improving transport, rather than on costly infrastructure projects. This which will require new skills to be developed by transport planners, both in the design of low-cost proposals, and in the promotion of these measures, and of transport improvement in general, to elected decision-makers.

Despite an inheritance of fragmentation in institutional functions and responsibilities for transport, there has been some progress during the 1990s towards consolidation and rationalisation. In developing the co-ordinated Transport Authorities called for in the latest legislation, South Africa also needs to heed the warnings against excessive centralisation. South African planning techniques have tended to follow conventional practice elsewhere, and have placed the question of funding towards the end of the planning process, which can lead to a series of wish-lists rather than fundable proposals. This can be blamed in part on the education process, and although national government takes some responsibility for education, it could be argued that significant and widespread changes in the training of transport planners have not been evident in the 1990s.

In conclusion, there is clearly a need for the on-going monitoring and assessment of progress in institutional development, and a critical look at practice in other developing countries can offer some lessons for South Africa.

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7. REFERENCES

- Abbas Anjum, G. and J.R.E. Russell (1997). Public transport regulation through a government organised NGO: the Faisalabad experience in Pakistan. *Transport Reviews* 17(2), pp105-120.
- Agarwal, O.P. (2000). Institutional framework for managing urban transport in Indian cities. *Urban Transportation and Environment. Proceedings of the CODATU IX Conference* eds O. Diaz, G. Palomas and C. Jamet, pp597-601. A.A. Balkema, Rotterdam.
- Ahlstrand, I. (1998). The rise and fall of the heroic transport plan for Stockholm. *Transport Policy* 5, pp205-211.
- Atkins, S.T. (1986). Transportation planning models – what the papers say. *Traffic Engineering and Control*, September 1996, pp460-467.
- Bajpai, J.N. and W. Hong (1996). Promoting an Integrated Strategy for Urban Congestion Management in Pusan, Korea. *Proceedings of the CODATU VII Conference*, New Delhi, ppV109-V121.
- Bandopadhyaya A.K. (1996). Experiments in Urban Transport Development: A Case Study of Calcutta. *Proceedings of the CODATU VII Conference*, New Delhi, pp V13-V21.
- Barat, J. (1990). Institutional Frameworks for Planning Transport in Third World Cities in H.T. Dimitriou and G.A. Banjo (eds) *Transport Planning for Third World Cities*, Routledge, London, pp216-256.
- Bhatnagar, S.K. (1996). A pragmatic approach for solution of urban transportation problem of Delhi. *Proceedings of the CODATU VII Conference*, New Delhi, pp113-123.
- Boccalandro, M., A. Bolivar and L.Castaneda (1996). Towards a Metropolitan Transportation Authority: Caracas, Venezuela. *Proceedings of the CODATU VII Conference*, New Delhi, pp V41-V46.
- Bolade, T. (1998). Policy reforms in the urban transport sector in Nigeria. *Urban Transport Policy: A Sustainable Development Tool. Proceedings of CODATU VIII Conference* eds P. Freeman and C. Jamet, pp87-93. A.A. Balkema, Rotterdam.
- Bultynck, P. (1992). A decade of urban public transport in Sub-Saharan Africa: Lessons from a comparative study. *Public Transport International*, January 1992.
- Bultynck, P. (1998). The Sub-Saharan Africa Transport Policy Program (SSATP): Urban transport component. *Urban Transport Policy: A Sustainable Development Tool. Proceedings of CODATU VIII Conference* eds P. Freeman and C. Jamet, pp833-841. A.A. Balkema, Rotterdam.
- Chinnappen, K.E. and J.S.Hugo (2000). The road traffic management process in South Africa with a Western Cape Province perspective. *Urban Transportation and Environment. Proceedings of the CODATU IX Conference* eds. O.Diaz, G. Palomas and C.Jamet, pp543-548. A.A.Balkema, Rotterdam.
- Chisholm, M. (2000) *The Long March from Realism to Reality*. Report 6 : A Contribution to the Series Supported by the Rees Jeffreys Road Fund. Landor Publishing, London.
- Datta, B.C. (1998). Comparative transport profile of mega-cities in India for strategic transport planning. *Urban Transport Policy: A Sustainable Development Tool. Proceedings of CODATU VIII Conference* eds P. Freeman and C. Jamet, pp157-164. A.A. Balkema, Rotterdam.
- De Saint-Laurent, B. (1998). Overview of urban transport in South Africa: Lessons from Europe and a proposed approach. *Urban Transport Policy: A Sustainable Development Tool. Proceedings of CODATU VIII Conference* eds P. Freeman and C. Jamet, pp.43-50. A.A. Balkema, Rotterdam.
- Dimitriou, H.T. (1990a). Towards a developmental approach to urban transport planning. *Transport Planning for Third World Cities* ed H.T.Dimitriou and G.A.Banjo. Routledge, London.

- Dimitriou, H.T. (1990b). The Urban Transport Planning Process: Its Evolution and Application to Third World Cities in H.T. Dimitriou and G.A. Banjo (eds) *Transport Planning for Third World Cities*, Routledge, London, pp144-183.
- Figuerola, O. (1996). A hundred million journeys a day: The management of transport in Latin America's mega-cities in Gilbert, A.G. (ed) *The mega-city in Latin America*, United Nations University Press, pp110-132.
- Fouracre, P.R., E.A. Kwakye, J.N. Okyere and D.T. Silcock (1994). Public transport in Ghanaian cities – a case of union power. *Transport Reviews*, 14 (1) pp45-61.
- Goel, T. and A.K. Gupta (1996). Coordination of Urban Public Transport System – An Indian Scenario. *Proceedings of the CODATU VII Conference*, New Delhi, ppV47-V54.
- Goetz, A.R. and Szyliowicz, J.S. (1997). Revisiting Transport Planning and Decision-making Theory: The case of Denver International Airport. *Transportation Research* 31A, pp263-280.
- Gomez-Ibanez, J.A. (1996). Big-city transit ridership, deficits and politics. *APA Journal* 62(1), pp30-50.
- Johnston, R.A., D. Sperling, M.A. DeLuchi and S. Tracy (1998). Politics and technical uncertainty in transportation investment analysis. *Transportation Research* 21A, pp459-475.
- Kain, J.F. (1990). Deception in Dallas: Strategic misrepresentation in rail transit promotion and evaluation. *APA Journal*, Spring 1990, pp184-196.
- Kane, L. (1998). Improving Urban Transport: Lessons from a city, Lessons for a city. *MSc Thesis*, University of Cape Town, South Africa.
- Kane, L. (2000) Themes for the Improvement of Urban Transport in the Developing World. (Unpublished) Report for CODATU, July 2000.
- Khare, B.P. and A.K. Agarwal (1998). Institutional and financial options for Mumbai suburban railway system. *Urban Transport Policy: A Sustainable Development Tool. Proceedings of CODATU VIII Conference* eds P. Freeman and C. Jamet, pp925-929. A.A. Balkema, Rotterdam.
- Khisty, C.J. (1993). Citizen participation using a soft systems perspective. *Transportation Research Record* 1400, pp53-57.
- Koprach, D.F. (1994). The modernisation of Santiago's public transport: 1990- 1992. *Transport Reviews*, 14(2), pp167-185.
- Krynauw, M.N. and S.J. Anderson (2000). Ensuring accessibility through integrated corridor development: The Mabopane Centurion development corridor. *Urban Transportation and Environment. Proceedings of the CODATU IX Conference* eds. O. Diaz, G. Palomas and C. Jamet, pp427-433. A.A. Balkema, Netherlands.
- Kulkarni, S.D. (1998). Urban road passenger transport in Indian mega-cities. *Urban Transport Policy: A Sustainable Development Tool. Proceedings of CODATU VIII Conference* eds P. Freeman and C. Jamet, pp299-304. A.A. Balkema, Rotterdam.
- Kunaka, C. (1996). Modernizing the informal sector: some policy issues. *Proceedings of the CODATU VII Conference*, New Delhi, ppV73-V82.
- Kwakye, E.A. and P.R. Fouracre (1998). The urban transport policy reform in Ghana. *Urban Transport Policy: A Sustainable Development Tool. Proceedings of CODATU VIII Conference* eds P. Freeman and C. Jamet, pp69-74. A.A. Balkema, Rotterdam.
- Kwakye, E.A. (1995). A multi-disciplinary approach to the urban transport problems of Ghana. *TWPR*, 17(4) pp421-437.
- Kwakye, E.A. and P.R. Fouracre (1996). The contribution of institutional development in the implementation of Ghana's urban transport project. *Proceedings of the CODATU VII Conference*, New Delhi, ppV145-V153.
- Kwakye, E.A., P.R. Fouracre and D. Ofosu-Dorte (1997). Developing strategies to meet the transport needs of the urban poor in Ghana. *World Policy and Practice* 3/1, pp8-14.
- Diaz, G. Palomas and C. Jamet, pp9-14. A.A. Balkema, Netherlands.

- Meyer, M.D. and Miller, E.J. (1984). *Urban Transportation Planning: A decision-oriented approach*. Mc-Graw Hill.
- Mitric, S. (1994). Urban transport strategy for Cairo: Advice and dissent. *Transportation Research Record 1441*.
- Puvanachandran, V.M. (1996). A study of urban landuse transportation planning in Papua New Guinea and proposals for the successful implementation of a case study - Lae City. *Proceedings of the CODATU VII Conference*, New Delhi, pp1107-1115.
- Rabinovitch, J and J. Hoehn (1995). A sustainable urban transportation system: the "surface metro" in Curitiba, Brazil. *Working Paper number 19, EPAT/ MUCIA Research and Training*, University of Wisconsin-Madison.
- Ratton Neto, H.X. (1998). The new challenges for Rio de Janeiro urban public transport. *Urban Transport Policy: A Sustainable Development Tool. Proceedings of CODATU VIII Conference* eds P. Freeman and C. Jamet, pp809-814. A.A. Balkema, Rotterdam.
- Rivasplata, R.C. (1996). The Plan Regulador Metropolitano de Santiago: An Integrated Approach to Urban Transport Planning? *Proceedings of the CODATU VII Conference*, New Delhi, pp1173-1182.
- Russell, J.R.E. and G.Abbas Anjum (1997). Public transport and urban development in Pakistan. *Transport Reviews*, 17(1), pp61-80.
- Turco, N.L. and S.N. Arcusin (1998). Institutional bottom-up approach for the Buenos Aires transport. *Urban Transport Policy: A Sustainable Development Tool. Proceedings of CODATU VIII Conference* eds P. Freeman and C. Jamet, pp803-807. A.A. Balkema, Rotterdam.
- Vasconcellos, E.A. (1996). The Urban Transportation Crisis In Developing Countries: Alternative Policies for an Equitable Space. *Proceedings of the CODATU VII Conference*, New Delhi, ppIII173-III181.
- Victor, D.J. (1996) The Urban Transportation Crisis In Developing Countries. Co-ordination of public transportation in metropolitan cities. *Proceedings of the CODATU VII Conference*, New Delhi.
- Wachs, M. (1995). The Political Context of Transportation Policy ed. S. Hanson. *The Geography of Urban Transportation*, pp53-77. The Guilford Press, New York.
- Walters, J. (1998). The role of institutional structure at metropolitan level in South Africa in organising public bus transport. *Urban Transport Policy: A Sustainable Development Tool. Proceedings of CODATU VIII Conference* eds. P. Freeman and C. Jamet, pp901-909. A.A. Balkema, Rotterdam.
- Williams, B. (1998). The Missing Link: Towards sustainable urban transport. *UNCHS 'Habitat Debate' Vol 4 (2)*, pp1-5.

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A REVIEW OF THE 1990s**

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