

**Delivering Urban Transport by Improving Decision-making:
Lessons from a City, Lessons for a City**

A Thesis presented to the

Department of Civil Engineering, University of Cape Town

In partial fulfilment of the requirements for the degree of Master of Science in Engineering

by

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Delivering Urban Transport by Improving Decision-making: Lessons from a City, Lessons for a City

Synopsis

This thesis starts from the position that the enterprise of transport planning is failing to deliver a transport system which fully meets the needs of urban dwellers. Criticisms of the process are presented and it is argued that one reason for the lack of delivery is the insufficient attention paid by transport planning professionals, and researchers, to the decision-making process. The nature of decision-making is explored by reference to various theoretical models of decision-making, and it is concluded that decision-making in an existing situation must be comprehensively described, before recommendations for its improvement can be made. Cape Town is chosen as the city for investigation. Checkland's Soft Systems Methodology is used for describing urban transport decision-making in Cape Town, and the approach is informed by seventeen in-depth interviews and forty-five questionnaires with decision-makers. The analysis yields insights which are categorised into four areas: issues of institutional re-organisation and funding; issues of politician involvement; issues of change in officials; issues of public involvement. An action plan is developed from the insights. It is concluded that the Soft Systems Methodology was useful in highlighting problematic areas in the decision-making process. The Cape Town experience is briefly compared with that of six other case studies. It is concluded that the Cape Town experience, although unique due to political upheaval in South Africa, also has some similar traits to that of other case studies. Finally some general conclusions about urban transport decision-making are made, which could be useful in considerations of how to improve the delivery of urban transport.

Declaration

I, L A Kane, declare that this is my own work and that it has not been submitted for a degree at any other University.

Signed by candidate
Signature Removed

September 1998

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List of Abbreviations

- CATWOE – A Soft Systems Methodology mnemonic, described in Chapter 5
- CBA – Cost Benefit Analysis
- CMC – Cape Metropolitan Council
- COLTO – Committee of Land Transport Officials
- CSIR – Council for Scientific and Industrial Research
- CTCC – Cape Town City Council
- LRT – Light Rapid Transit
- MINCOM – Ministerial Committee (of Transport Ministers)
- MP – (Linstone’s) Multiple Perspectives approach
- MSDF – Metropolitan Spatial Development Framework
- MTAB – Metropolitan Transport Advisory Board
- MTP – Metropolitan Transport Planning (branch of the former Cape Town City Council)
- ORMET – East Rand Metroplitan Area
- RDP – Reconstruction and Development Programme
- RSC – Regional Services Council
- SSM – Soft Systems Methodology
- UCT – University of Cape Town
- UK – United Kingdom
- USA – United States of America
- UTA – Urban Transport Act (of 1977)

"The world moves into the future as a result of decisions not as a result of plans"

(Kenneth E. Boulding, "Reflections on Planning: The Value of Uncertainty", 1974)

1. Introduction

1.1 Background

In April 1996 local government elections were held in the Western Cape, heralding a new era in political decision-making in Cape Town. In the period following the local government elections two significant new policy documents on transport have been published, the National White Paper on Transport Policy, and the White Paper on Western Cape Provincial Transport Policy. Both of these documents highlight the important role which transport plays in development, and the new transport policies challenge the providing authorities to implement schemes which will improve the quality of life for all. In the context of these major political and transport policy changes, it is timely to question the process by which transport schemes move from idea to implementation. *Fundamentally, does the current transport planning process deliver?*

Of course, Cape Town is not unique in facing transport problems. The issues may differ, and the development needs may vary, but urban areas throughout the world are faced with problems raised by the need to transport people throughout an urban area. Given the universal nature of the transport problem, it is perhaps not surprising that transport planning, traffic engineering and other associated disciplines such as transport economics are now widely researched. In particular, much has been written about transport modelling, and research efforts to improve transport models are in place in many universities. Wegener (1994) identifies 20 centres where research into a particularly specialised form of transport model (those combining land-use and transport) has been undertaken.

Despite this huge research effort, some critical voices have been raised, citing the 'failure' of transport planning and modelling:

"Current approaches to transportation planning have yielded, at best, inconsistent results.....Planning is a critical element in the development and implementation of sound transport projects, yet existing practices have resulted in numerous problems and in, some cases, outright disasters." (Goetz and Szyliowicz, 1997)

"In the USA then, we have seen the demise of public transport and growing car use, with several social, economic and environmental consequences. From this evidence, the UTP (Urban Transport Planning) process can hardly be said to have been a success, an outcome for which there are numerous explanations." (Tolley, 1995: 205)

"after the failures of initial attempts to address planning problems, modellers do not appear to have seriously re-evaluated or altered their approach", and, further "Most formal models, including large-scale urban models, are too inflexible for strategic planning. They require too much information, they produce too much information that is not needed for any particular problem, and they shed too little light on the reasons for strategic choices." (Lee, 1994)

Atkins (1977) also criticised modelling. *"We have a series of excessively complicated and expensive models using unsubstantiated and biased techniques to provide information of dubious accuracy for answering the wrong questions."*

Dimitriou, in his book 'Transport planning for Third World cities' (1990:174), is more specific about the implications of traditional transport planning for the 'Third World'. *"An understanding of the contribution of transport to city development is fundamental to urban transport planning - yet the conceptual review and application of the UTP Process and its derivatives suggests that much more is understood about traffic engineering, transport operations and travel behaviour aspects than the impact of transport improvements on urban communities, land use and wider urban development policies."*

"A new perspective on the transportation planning process, and how it responds to the new demands of the decision-making process, is needed" (Meyer and Miller, 1984)

The underlying premise of *this* thesis is that transport research has focused too much on the mainly technical mechanisms which support transport decision-making, such as transport modelling, and that insufficient attention has been given to the decision-making *process* itself. This is supported by Wachs who, in 1985, said *"we may describe almost all of the foregoing [transport modelling-related] research tasks as research within planning, rather than research on planning. Research agendas of this sort deal primarily with data, models and evaluation techniques of planning as it is practised by technical experts in relative isolation from politics and institutional arrangements" and "...only by improving our understanding of transportation institutions and decision-making processes, as messy and ill-defined as they may be, can we focus the work of the research community on improving the quality of public policy-making and decision-making. This is the ultimate purpose of all research in transportation"*.

In conclusion, this thesis is based on the premise that transport planning is *failing* to deliver a transport system which fully meets the needs of urban dwellers. The thesis argues that one reason for this lack of delivery is the insufficient attention paid by transport planning researchers, and thence by the transport planning profession, to the decision-making process. The thesis proposes a particular method for investigating the decision-making process, in order to develop insights and an action plan.

1.2 Objectives of this Thesis

The objectives of this thesis are to:

- describe the present urban transport decision-making processes in Cape Town;
- illustrate that a detailed and rigorous investigation of the decision-making process can yield insights, and an action plan, which could assist in improvements to the execution of the transport planning process;
- illustrate how social science methods (interviews and surveys) are a means of undertaking this investigation;
- illustrate that Checkland's Soft Systems Methodology is an alternative means of undertaking this investigation;
- illustrate that the examination of case studies is a further means for undertaking this investigation.

The literature review which supported this thesis is described in the next Chapter.

1.3 The Structure of this Thesis

The research work which underpins this thesis was not sequential in nature, and so it has been a challenge to fit the written work into a sequential format. Figure 1 is given as an aid, to assist the reader negotiate the report. It can be seen that there are several possible ways of reading the document.

Chapter 2 describes theoretical models of decision-making, in particular the rational comprehensive and incrementalist models. It concludes by discussing the issue of perspectives, which is a key feature of the two methodologies for describing and analysing decision-making discussed in **Chapter 3**: Linstone's Multiple Perspectives Approach and Checkland's Soft Systems Methodology (SSM). Checkland's SSM is adopted as the analysis method in this thesis and the fieldwork used to inform the analysis is described in **Chapter 4**. The SSM is outlined in **Chapter 5**, as an introduction to the first part of the approach, the elucidation of the 'rich picture'. The rich picture of decision-making in Cape Town is given in **Chapters 6 and 7**. The further application of SSM is given in **Chapter 8**, and this leads to insights and then to an action plan, in **Chapter 9**. International case studies of decision-making are described in **Chapter 10**, and some general conclusions about them are drawn. The Cape Town experience, in light of these case studies is also considered in this chapter. The whole approach of the thesis is critically examined in **Chapter 11** before concluding remarks and thoughts on further work are given in **Chapter 12**.

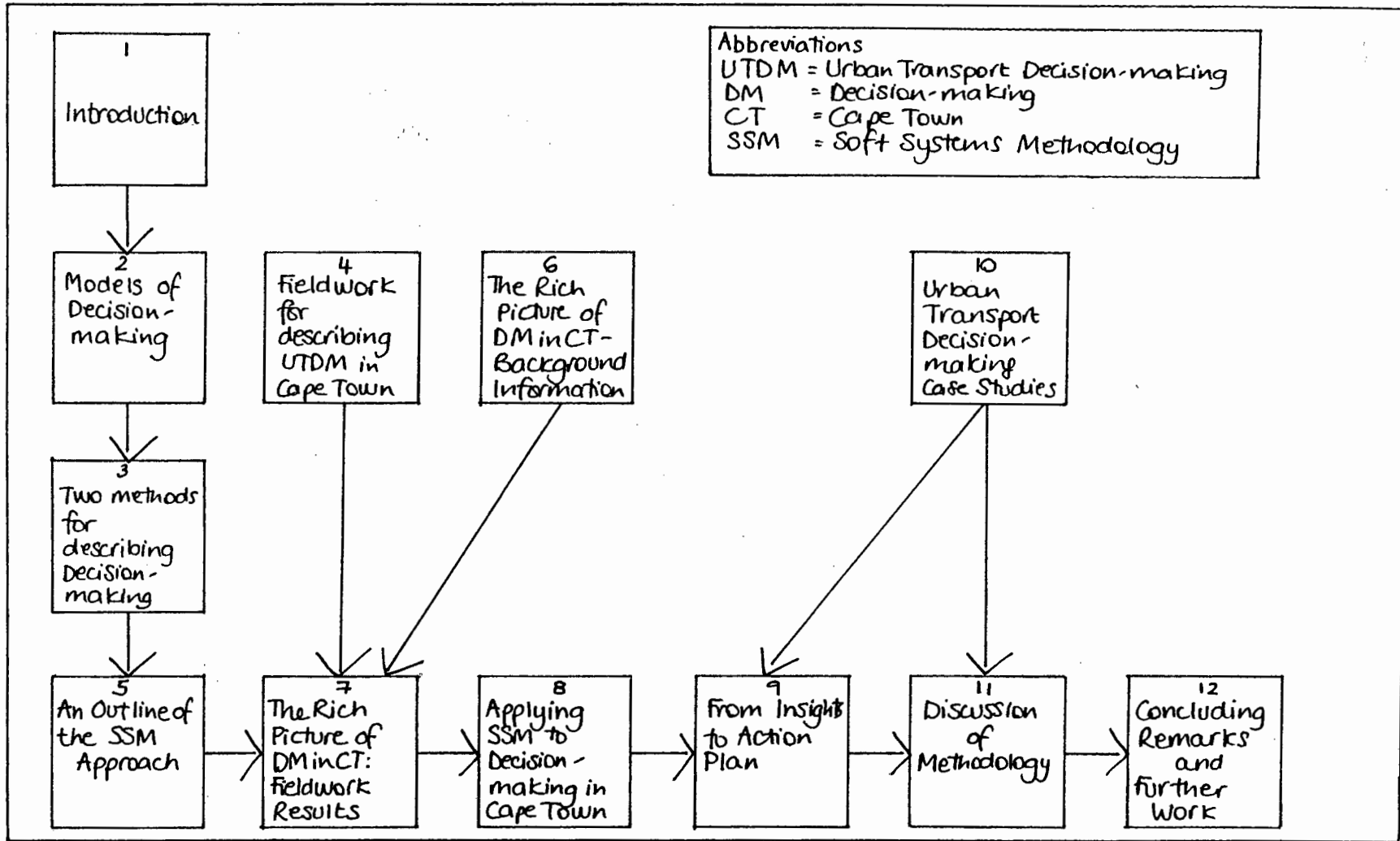


Figure 1 The Structure of this Thesis

2. Models of Transport Decision-making

2.1 Introduction

This Chapter describes some of the conceptual models which have been used in the literature to define transport decision-making. To an extent, decision-making defies description, and refuses to fit neatly into categories. The dynamic nature of it; the number of people involved; the uncertainty over what are 'key' events and the broad range of contexts across differing geographic areas conspire to make the description of decision-making an illusive exercise. Perhaps because of this, the transport literature rarely documents the decision-making exercise. An exception is the work by Goetz and Szyliowicz (1995,1997), which discusses case studies of technological decision-making, in which transport case studies feature. More common is the documentation of a transport planning process (May, 1991 and Truelove, 1992) and such work also discusses the political dimension. In contrast, there are many examples of work examining evaluation and assessment methods, or the use of decision-making frameworks. In South Africa alone, a quick and superficial review of the local literature yielded the following six reports dealing directly with assessment:

- Priority Assessment of Transportation projects in the central Witwatersrand Area of South Africa, PJ Conway, MSc Dissertation, University of Witwatersrand, 1994.
- Prioritisation in the Urban Transport Planning Process. Project Report 91/415 CSIR on behalf of the South African Roads Board
- Priority Assessment ORMET Phase 1. A review of Priority Assessment Procedures in Transportation 1985. Prepared for the East Rand Metropolitan Area
- Methods and Criticisms of Evaluating the Effectiveness of Rural Road Projects in a Developing Country Environment. A.F.Shaw. MSc Dissertation, University of Witwatersrand, 1991.
- A Procedure for Integrating Environmental Concerns into the planning and Implementation of Urban Road Projects. Research report RR90/138. CSIR on behalf of Department of Transport 1991.
- Guidelines for Conducting the Economic Evaluation of Urban Transportation Projects. Municipality of Cape Town 1995

Hence it can be seen that the field of transport *assessment* is well researched.

2.2 Definitions

At the outset, it is useful to draw a clear distinction between:

- the transport assessment process;
- the transport planning process; and
- the transport decision-making process. (See Figure 2).

The transport assessment process is the method for comparing different schemes, usually on an economic basis, but sometimes also on an environmental, financial and social basis.

The transport planning process usually encompasses a transport evaluation process, but can also include data collection, modelling, design and planning for management and implementation.

The transport decision-making process specifically refers to the interaction within and between groups of officials, politicians, and other interested parties, which is intended to lead to transport decisions. The decisions can refer to adoption of policy, design, or implementation of schemes.

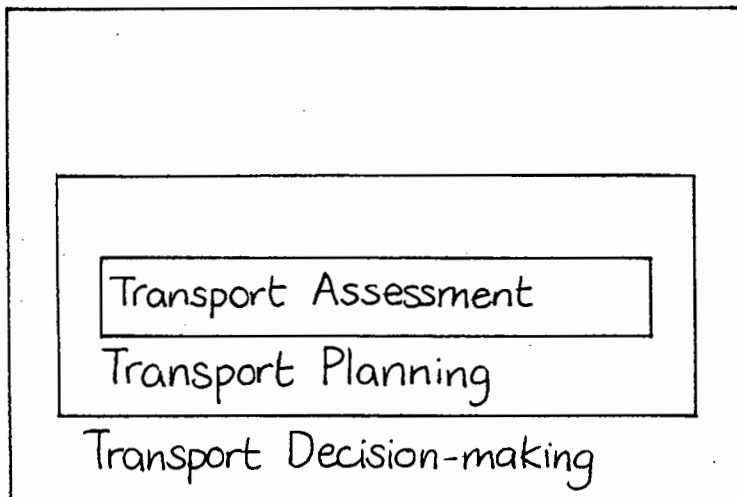


Figure 2 Transport assessment, planning and decision-making

Despite the complexities and the difficulties in defining decision-making, and the lack of in this field, there must surely be benefits in developing an understanding of the problem, by placing our experiences of decision-making within a conceptual framework. Such a framework could be invaluable in providing insights into the problem. Given this, the section below reviews literature which has discussed decision-making models, and pulls out the main themes, relevant to this thesis.

2.3 Descriptions and Lessons

When considering papers on transport decision-making, a secondary distinction is required. On the one hand there are those papers which simply *describe* decision-making processes which are already in place. Some may call these case studies. On the other hand there are papers which attempt to describe a

methodology for *improving* on existing decision-making, and drawing *lessons*. The improvement of existing practice is the focus of this thesis.

2.4 Literature Reviews of Conceptual Models

A common starting point for a thesis is to note the work which has already been undertaken in the field of research. A literature search was undertaken using the key words urban/city transport and decision/decision-making/evaluation/evaluating and policy/policies/politician or government. The search was undertaken using the TRIS, Engineering Index and Enviroline databases. This yielded 180 items. Many of the items were USA reports, and so were either difficult to obtain, or apparently not relevant from the abstract information given. Authors which appeared more than once were searched for separately, on the TRANSPORT CD-ROM.

The literature review revealed that, while a few have attempted to describe or define urban transport decision-making, the next step, of suggesting techniques for improving that process has not been taken, to any great degree. Hence the literature review, by necessity, concentrates on descriptions of urban transport decision-making even though the eventual focus of this thesis is on improvements to the process. Nevertheless the literature review was an important step in defining the scope of the thesis and so is reported fully here.

2.5 Decision-making as a Continuum

Hutchinson (1981) and Nutt (1981) (who was used as the key reference in Ortuzar and Willumsen's book 'Transport Modelling') considered decision-making to be situated along a continuum, as shown Table 2.1. They both identify an analytical extreme to this continuum, what Wachs (1985) (acknowledging Linstone, 1984) describes as the "rational comprehensive model of planning, institutions and decision-making", defined by:

- "the notion that analysis and decision-making are separable activities performed by different actors;
- the definition of "problems" that are abstracted from a complex world, and the implicit assumption that problems can be "solved";
- an orientation towards optimisation, or searching for the best solution;
- a commitment to reductionism; research and study of systems that are defined by a limited number of elements or variables; and by their interactions; reliance on data, models and combinations thereof, as modes of representation and inquiry;
- quantification of information;
- commitment to objectivity: the belief that the analyst or researcher is outside the system he or she is studying, and that knowledge can be found which is independent of the observer;

- a commitment to problem -solving as a sequence of logical steps: for example, problem definition, specification of alternatives, enumeration of goals, assessment of consequences, selection of a course of action and implementation of a selected course of action."

A number of authors mention the rational model, or technical paradigm, and argue that this view has dominated not only the transport planning field, but all areas of academic inquiry. Whilst there appears to be some consensus between some authors of the existence of a rational comprehensive model, agreement about what lies at the opposite end of the continuum (if, indeed, such a continuum exist) is limited.

		<i>Continuum</i>		
<i>Author</i>	<i>Date</i>	<i>From</i>	<i>Then</i>	<i>To</i>
Hutchinson	1981	<u>Analytical</u> - "a set of alternative policies is identified, some logical and explicit analytical process is used to explore the potential outcomes..."		<u>Intuitive</u> - "the Gestalt of information, including the insights provided by systems analysis, results in a particular policy direction being taken"
Nutt	1981	<u>Analytical/Mechanistic</u> - "assume that important decision criteria can be quantified and measured...represents natural processes in machine-like terms". For example Master Plans, Normative Decision Theory	<u>Midrange</u> - For example, Group Decision-making, Behavioural Decision Theory	<u>Forensic/ Organic</u> - "relies on some form of debate...stems from reflecting or talking to others...deal with causal relationships that resist quantification". For example Adaptive Decision-making, Mixed mode strategy

Table 2.1 Continuums of Decision-making

Alongside the analytic/organic continuum, other authors have identified another continuum which considers the strategic nature of the decision.

Lee (1994) identifies three types of planning for decisions:

- strategic, where the long term is considered in broad terms, in order that current actions do not rule out future possibilities;
- tactical, where hard decisions are made among alternatives; and
- implementation, which is the execution of technical decision.

Hutchinson identifies two broad classes of transport policy:

- strategic, concerned with time horizons of 20-30 years, where the transport system is viewed as just one element of a development strategy; and
- tactical, concerned with marginal shifts in traveller behaviour, and a time horizon of 5-15 years.

A further definition of this set is given by Crow and Bozeman (1987):

- Strategic Management: shaping new public policy
- Tactical Management: designing the program response to the policy action. This includes the establishment of goals and objectives for the long-term implementation of the program
- Operations management: integration of a new activity into the agency. operational planning for new program activities.

2.6 Arenas of Decision-making

Some authors, although attempting to describe and categorise the decision-making, have been unable to place the categories along a continuum. Meyer and Miller (1984) describe five models of decision-making. The first three (rational actor, satisficing and incrementalist) concern individual decisions. The final two: organisational and political bargaining concern bodies of people. The rational actor model fits with the 'rational comprehensive' perspective described above. The satisficing model recognises the difficulty in examining all alternatives (as is required in the strict definition of the 'rational comprehensive' model). In the satisficing model, a reasonable search is undertaken to find acceptable options. The incrementalist approach requires the decision-maker to focus only on policies which differ marginally from existing policies. Only a small number of 'important' options are considered, and the search for improvements is continuous (that is, it is accepted that there is no single 'right' solution).

Meyer and Miller's organisational process decision-making approach acknowledges the influence of the capabilities, skills and resources of implementing organisations on the decision. The political bargaining view of decision-making acknowledges a large number of actors, and the need for political bargaining. The key difference between this and the 'rational comprehensive' model is the lack of obvious 'optimality'. In the political bargaining approach, there is a need to provide information to all interest groups, and the analysis needs to be able to respond quickly to requests for information during

bargaining. Both the organisational and political bargaining approaches acknowledge different perspectives on the decision-making situation. The issue of perspectives is discussed further below.

Malouin (1983) also attempted to categorise decision-making and identifies four methods, summarised in Table 2.2, based on Table 2 of the 1983 paper. In this paper, he identified several features which distinguished the four approaches examined. He noted that the treatment of the actors (defined as the client and the decision-maker) differed between the approaches. In the Engineering Method the client and the decision-maker are:

"assumed to be both rational and influenceable by arguments that are factual and logical. This [Engineering] method does not distinguish between the client and the decision-maker nor does it provide any method for doing so."

Malouin believes the Engineering approach lends itself to structured problems, with an emphasis on efficiency, rather than effectiveness. An efficient system is defined as one which does well within itself, that is intrinsically. An effective system is one which has outputs that are relevant to its environment. The Engineering Method is of particular interest for this thesis, since engineers, and hence the Engineering Method has strongly influenced transport planning practice.

<i>Method</i>	<i>Differentiation between categories of actors?</i>	<i>Must the actors perceive the problem in the same way?</i>	<i>Hypothesis about situation</i>	<i>Primary concern</i>
Engineering-type (analytic)	No	Yes	Simple	Efficiency
Classical method of information system design	Yes	No, but their perceptions must be compatible	Simple	Efficiency and effectiveness
Nadler's Ideal system method	Yes	No, but their perceptions must be compatible	Complex	Efficiency and effectiveness
Checkland's Soft Systems Methodology (SSM)	Yes	No	Complex	Efficiency and effectiveness

Table 2.2 Malouin's Definitions of Decision-making

Goetz and Szyliowicz (1997, 1995) have investigated several decision-making methodologies and provide a useful review of alternatives to the rational comprehensive model which they believe has dominated and failed in transport planning. They describe the alternatives to the rational comprehensive model as 'strategic' or 'adaptive'. They found that all of the strategic/adaptive approaches included certain common features, in particular a statement of the need for flexibility and the importance of maintaining this in uncertain environments. The approaches they quote are:

- incrementalism (attributed to Lindblom, Hayes, Weiss and Woodhouse);
- satisficing and organisational behaviour perspectives (Simon, March);
- mixed scanning (Etzioni);
- bureaucratic politics (Allison, Halperin);
- cognitive and cybernetic models (Steinbrunner, Axelrod, Jervis); and
- multiple perspectives (Linstone).

Of these the notion of incrementalism and Linstone's concept of multiple perspectives are considered further below.

2.7 Incrementalism

Incrementalism (known popularly as 'the science of muddling through') was proposed by Lindblom in the 1950's as an alternative to the rational comprehensive model. (Lindblom, 1959). Its tenets are:

- limitation of analysis to a few somewhat familiar policy alternatives, of which one possible form is simple incremental analysis: consideration of alternative policies differing only marginally from the status quo;
- intertwining of analysis of policy goals and other values with the empirical aspects of the problem - that is, no requirement that the values be specified first with means subsequently found to promote them;
- greater analytical preoccupation with ills to be remedied than positive goals sought;
- a sequence of trials, errors and revised trials;
- analysis that explores only some, not all, of the important possible consequences of a considered alternative;
- fragmentation of analytical work to many partisan participants in policy making, each attending to their piece of the overall problem domain. (Weiss and Woodhouse, 1992)

The incrementalist approach views the rational comprehensive model as an unachievable ideal, which does not occur in practice, for many reasons. Firstly humans simply do not have the ability to conceive the entirety of complex problems; furthermore, there are significant cost implications in attempting to

achieve complete knowledge. (The data requirements of transport modelling bears witness to this very well). In a political environment, agreement on objectives is simply not possible, and the best one can hope for is a political status quo, arrived at as a result of concessions amongst those involved. Finally, time constraints mean that major changes in policy cannot command from decision-makers the time required to comprehend them, and hence decision-makers opt for incremental changes to the existing situation. (Hayes, 1992)

2.8 Implications of the Rational Comprehensive and Incrementalist Models for this Thesis

This thesis assumes that the rational comprehensive model does not exist in reality, and that incrementalism is closer to how decision-making takes place in Cape Town. This has significant ramifications for the way in which one tries to describe, and gain insights into, decision-making. If this thesis were to proceed, assuming that a rational comprehensive model of decision-making is valid, then there exists a *single ideal* of how decision-making *should* be, against which the existing situation, in this case Cape Town, can be measured. In contrast, if the ideal of the rational comprehensive model is assumed to be either unattainable, or undesirable, and the *reality* of some form of incrementalism is accepted, then the opportunity for measuring against a single ideal becomes redundant.

So, this leaves a dilemma for the thesis. Assuming that there is no single ideal model of decision-making (which seems to be the conclusion of much of the literature), how can one judge the appropriateness of an existing decision-making process? What meaningful recommendations can come from a thesis, which offers no single ideal? In answer to these questions, the process used in this thesis has been to comprehensively describe decision-making in one case-study city, Cape Town, and then to derive *insights/lessons*, as a result of the fieldwork (analysed in a number of different ways). Hence one major outcome of the thesis is a series of statements essentially stating "this is a theme noticed about decision-making", rather than a series of statements "the existing situation *does not meet the ideal* in these ways, and hence requires amendment". Stemming from this is an action plan, which is provided as *a possible solution* to the problem, rather than *the solution* to the problem. Rejection of the rational comprehensive model requires the researcher to follow an altogether more humble path than would otherwise be the case.

2.9 Perspectives of Decision-Making

Wachs considers perspectives with relation to transport planning and, borrowing heavily from Linstone (1984) he describes the rational comprehensive perspective, the organisation perspective and the personal perspective, as they apply to transport planning. (Linstone describes a Technical, Organisational and Personal Perspective). Linstone's work is different from any described thus far, in that it does not attempt to prescribe a single model of decision-making, rather to suggest that the rational

comprehensive approach is not only a model *but is also a worldview, a paradigm*, in which most technologists, scientists (and hence transport planners) fit. A worldview can be thought of as a lens, a pair of glasses, through which one views the world. This lens will distort, bring into focus, highlight or even obscure certain pieces of reality.

The risk of remaining in one worldview, is that it is believed by the individual to be 'right', and so possibilities which may be revealed by another worldview are simply not seen. Hence, for many transport planners research has involved refining and perfecting techniques of modelling, data analysis and forecasting, in the belief that if we can perfect the model, then maybe we can solve the problem. As Wachs points out:

"Decision-makers are often dissatisfied with the usefulness of analytical studies not so much because the work is incompetent or technically limited, but because it appears misguided and irrelevant. It appears misguided and irrelevant because decision-makers and planning organisations do not necessarily behave in accordance with the rational comprehensive model".

Checkland (1989), in his work on Soft Systems Methodology takes the perspectives issue one step further and applies it to a particular 'inquiring system'. He argues that a description of a system cannot meaningfully be described, without an accompanying description of the worldview which spawned it. (Worldview is defined by Checkland as the "stocks of images in our heads, put there by our origins, upbringing and experience of the world, which we use to make sense of the world and which *normally go unquestioned*")

The work of Linstone and Checkland have strongly influenced the work of this thesis.

3. Two Methods for Describing Decision-making

3.1 Introduction

The first objective of this thesis requires the description of the present urban transport decision-making process in Cape Town "as messy and ill-defined as they may be" (Wachs, 1985), with the ultimate intention of deriving insights, and then an action plan, which may be of use in improving the current situation. Social science methods, that is the reviewing of interviews and data following techniques were used (reported in Chapters 4 and 6), and the social science inquiry alone did yield insights, especially at the time of the fieldwork. However, additional methods were also used in order to ensure a rigorous, comprehensive and self-reflective approach to the analysis. These methods may be considered as part of the Systems Management literature. Revans (1982), an early writer in this area, argues that management science has clear and distinct parallels with the scientific method, as shown in Table 3.1.

<i>The Scientific Method</i>	<i>The Management Method</i>
Observations on the external world	Survey in the field. A determination of what needs exist and what artefacts have already been produced to fulfil these needs
Formulation of theories based on these observations	Policy development. Decisions about what further or different artefacts to produce
Design and conduct of experiments to test these theories	Operations development. The establishment of methods of 'manufacture'
Comparison of the experimental results with the results predicted by these theories	Inspection. Processes of audit
Rejection, modification or confirmation of these theories in accordance with the results of these comparisons	Control. Changes to the artefacts proposed, or in the methods used to produce them

Table 3.1 Parallels drawn by Revans between the Scientific and Management Analysis Methods

Two methodologies were considered for the 'scientific' analysis of the decision-making process: Linstone's Multiple Perspectives approach (MP), and Checkland's Soft Systems Methodology (SSM). A

brief consideration of these is given below. A third technique, of investigating other international decision-making case studies was also used, but eventually played only a minor role in this thesis. The case studies are reported, and the usefulness of them discussed, in Chapter 10.

3.2 Some Historical Background

In the 1950's and 1960's, following the success of the operations research of World War II, engineers began to think beyond the design of single objects, towards creating *systems*, that is, a connected set of objects, and a method for using them. There developed 'systems engineering' profession, and with it a useful tool for analysing certain engineering problems. The optimism surrounding the methods was ebullient, so much so that by 1971 it was declared:

"I doubt if there is any such thing as an urban crisis, but if there were MIT would lick it in the same way we handled the Second World War." (Thompson, quoted in Linstone, 1984)

However, Linstone and Checkland grew cynical of the systems engineering approach and its ability to solve some problems. In 1984 Linstone published 'Multiple Perspectives for Decision-making' which defined a method for the better understanding of problems which had the following features:

- ill-structured nature (typically socio-technical);
- significant policy and/or decision analysis content; and
- significant human aspects (societal or individual).

Urban transport fits this description, which is why Linstone's approach was considered for use in this thesis.

Checkland found that the systems approach was often an inappropriate tool, and quite irrelevant for dealing with "messy, changing, ill-defined problem situations". (It is interesting to note that Wachs, in 1985, recognised that the transport decision-making process is 'messy and ill-defined', and called for new research directions to try and investigate this. Four years later, Checkland describes his SSM methodology as a response to 'messy, changing, ill-defined problem situations'!) In 1981 Checkland developed a new systems approach which he termed the 'Soft Systems Methodology', in contrast to conventional 'hard' systems engineering. Checkland believed that the "essence of the [hard systems engineering] approach is the selection of an appropriate means to achieve an end *which is defined at the start and thereafter taken as given*". (My italics). Whilst *hard* systems approaches are appropriate for trying to find *how* to solve a problem, Checkland's *soft* systems approaches also help to define *what* the problem is.

At the root of both Checkland's and Linstone's methodologies is the acceptance that any situation in which humans act together will be complex, simply because individuals have *differing perspectives*. The 'soft' approach of both methodologies embraces this difficulty, and includes an investigation of the differing perspectives of the actors involved as one part of trying to describe what the problem is. This is in stark contrast to the hard approach, where the dimension of human perception is avoided, and it is assumed that the problem can be solved by the application of facts and logic alone.

3.3 An Introduction to Linstone's Multiple Perspective Approach (MP)

Linstone advocates that problem solvers should not adopt a single rational perspective, as discussed in section 2.9 but rather a multiplicity of perspectives, which he groups into technical, organisational and personal. The main features of the three perspectives are summarised in Table 3.2.

	<i>Technical</i>	<i>Organisational</i>	<i>Personal</i>
<i>World view</i>	Science-technology	Social infrastructure Hierarchical to egalitarian	The self
<i>Ethical basis</i>	Rationality	Justice/fairness	Morality
<i>Goal</i>	Problem solving Product (eg design)	Process Action and implementation	Power, influence, prestige Status maintained or improved
<i>Modes of inquiry</i>	Data and analysis Abstraction and modelling	Negotiation/ consensus	Intuition, individual reality Experience, learning
<i>Time concept</i>	Technological time	Social time	Personal time
<i>Planning horizon</i>	Far Often little breadth	Intermediate distance Intermediate breadth	Short distance Variable breadth
<i>Constraints</i>	Problem simplification by limiting variables and relations Need for validation, replicability Objectivity emphasised	Faction problems Importance of loyalties and credentials Restricted access by outsiders or need to recruit members	Inner world focused (highly subjective)
<i>Characteristics</i>	Prediction Optimisation Quantification Uncertainties noted	Recognition of partial unpredictability Incremental change, slow adaptation Standard operating procedures Uncertainties avoided	Need for certainty, personal beliefs Filtering out of images inconsistent of past beliefs Focus on simplistic hypotheses Fear of change and unknown
<i>Communication</i>	Technical report, briefing	Directive, conference, interview Private language with insiders	Narrative (story), discussion, speech Importance of personality

Table 3.2 Linstone's Three Perspectives

Adapted from Table 8 of 'Multiple Perspectives for Decision-making' (Linstone 1984).

In simple terms the MP approach requires the problem-solver to separate the two questions “*what* are we looking at?” from “*how* are we looking at it?” The word perspective is used to distinguish how a problem is viewed. Thus the same problem is viewed from a number of different angles, giving different insights.

3.4 An Introduction to Checkland’s Soft Systems Methodology (SSM)

Soft systems thinking, as defined by Checkland, requires the following:

- Finding out about the situation
- Describing the situation in terms of:
 - customers of the process;
 - actors involved;
 - 'transformation' (problem solving) process;
 - 'worldview' (mindset/ paradigm) of the actors;
 - owner of the problem (the person who can stop it);
 - environment, including the constraints and context.
- Defining 'root definitions' (the formal expression of the problem).
- Building conceptual models.
- Investigating the intervention, social system and politics of the situation.

Checkland’s methodology is not explicit about the perspectives which should be examined, as Linstone’s is. Rather, Checkland leaves the researcher to define the perspectives which are important. Overall, Checkland’s approach is better defined in the literature and, since the author had also received tuition in some of Checkland’s approaches, it was decided that SSM should be used for this thesis. Nevertheless, the author believes that the Multiple Perspectives approach may also give some useful lessons to transport decision-makers, maybe even better than SSM. Unfortunately, the use of both approaches was outside the scope of this thesis.

More about the SSM process is given in Chapter 5. The outcomes of the methodology, in terms of a description of urban transport decision-making in Cape Town, are described in Chapter 6.

4. Fieldwork for Describing Urban Transport Decision-making in Cape Town

4.1 Introduction

Before the SSM approach could be used to describe the Cape Town decision-making situation, substantial input data was collected via:

- attendance at committee meetings, in order to gain familiarity with existing procedures;
- interviews on relevant issues with senior officials;
- reading of pertinent legal and policy frameworks, and discussions in order to determine the current state of legislation under review.;
- exploration of the views of key members of the decision-making process, using in-depth interviews;
- exploration of views of a broader range of people involved in the process, using a questionnaire.

The methodology for the survey work is described in Sections 4.3 and 4.4. Some more detail is given in Appendices A. to J.

4.2 Development of Surveys

The development of the surveys took place in several stages. Initially a comprehensive questionnaire, covering both open-ended and closed-ended questions was proposed, but upon consultation with a social survey specialist this was finally rejected as it was too complex, and attempted to cover both in-depth and broader issues at the same time. It was replaced by a two pronged survey procedure: detailed in-depth interviews with a selection of key people involved in transport decision-making, and a much shorter self-administered questionnaire, for a wider selection of people. The objective of the quantitative self-administered questionnaire was to explore the existing decision-making processes, and in particular the tolerance of ambiguities; the importance which the respondents placed on developing a 'vision' (an aspect which had arisen a number of times in the literature); and also beliefs about transport issues. The qualitative interviews explored the participants' views on transport decision-making in general; their definition of a 'good' transport decision and the identification of any improvements to the decision-making process, which participants believed were necessary.

The notes used to guide the interviews, and the quantitative questionnaire, were developed in consultation with others and were piloted on members of staff , and a mature student who had been involved in local government politics, in the Civil Engineering Department at UCT. Unfortunately

there was insufficient time to undertake a broader pilot study. The final questionnaires, and the notes used to guide the qualitative in-depth interviews are given in Appendices A. to C.

4.3 Description of Quantitative Surveys

The purpose of the quantitative attitudinal survey was to explore some of the themes which had emerged from the readings and the preliminary encounters with decision-makers in Cape Town. The questionnaire was split under three headings, (attitudes on decision-making in transport, general attitudes and attitudes on transport). In the first two sections, the questions were grouped into threes, so that a total of six attitudinal issues were addressed by the questionnaire:

Attitudes on Decision-making in Transport

1. Quantification of problems - how important is quantification to an understanding of the problem?
2. Official versus political decision-making - to what extent should one group be involved in the decision-making process?
3. Economic efficiency as a means of measuring 'success' - is this important?

General Attitudes

4. Tolerance of ambiguity - does the person believe that problems have clear-cut solutions?
5. Inclination to change views/ mindset.
6. Importance placed on 'visionary' thinking.

The final section dealt with a broad range of Transport Attitudes, and was not separated into themes. This helped in the understanding of the mindsets of the actors involved in the decision-making. The results of the questionnaire are described in section 6.4 and discussed in section 10.

In total, 93 questionnaires were sent out to 50 officials and 43 councillors. Any official who belonged to the Metropolitan Transport Liaison Committee, or who currently belonged to the 'Moving Ahead' Steering Committee, or to the Metropolitan Transport Advisory Board (MTAB), was sent a questionnaire. Councillors who were members of the new MTAB, or of the Economic Development Planning and RDP; Metropolitan Infrastructure, Works and Service; Metropolitan Planning or Exco committees of the Cape Metro Council were also sent questionnaires. (These affiliations are described in more detail in Chapter 6). A question was asked at the beginning of the questionnaire, regarding status: official, politician, or other. A question was also posed regarding job status: town planner, engineer, transport planner or other. A summary of the response is given in Table 4.1 and Table 4.2.

	<i>Official</i>	<i>Politician</i>	<i>Other</i>
Number of responses	33	12	1

'Other' indicates an invalid response.

Table 4.1 Summary of Questionnaire Responses

	<i>Town Planners</i>	<i>Engineers</i>	<i>Transport Planners</i>	<i>Transport planners/engineers</i>	<i>Transport planners/town planners</i>	<i>Others</i>
Number of responses	9	17	4	3	2	11

Several people responded in more than one of the job description categories, hence the joint designations.

Table 4.2 Breakdown of Questionnaire Responses

The response was good, with a total of 46 questionnaires received and used in the analysis. The response rate from officials was 66%, but from councillors only 28%. The possible reasons for the poor response from councillors emerged from later interviews. It may be that new councillors with little transport knowledge were daunted by the questionnaire (particularly those with transport-related, but not transport-specific portfolios). Also, a number of councillors complained of the work load, hence a questionnaire may have been seen as irrelevant and not worth spending the time completing it.

The data from the questionnaires is summarised in Section 7.2 and is used throughout Chapter 8. The questionnaire form used is reproduced in Appendix A.

4.4 Description of Qualitative Surveys

The individuals interviewed for this thesis were all members of the Metropolitan Transport Advisory Board during April 1997. This board was chosen for detailed review since at that time it appeared to be central to the decision-making process in Cape Town. Since then, partly due to local government re-organisation, the situation has changed and the power appears to be shifting. Nevertheless the MTAB membership are still largely involved in transport decision-making, and some of the members have been involved for a period, thus giving an historical perspective to the work.

Initially eight members were interviewed (four politicians and four officials), using the interview guide given in Appendix A. The interview guide outlined issues which had emerged as of possible importance from previous readings or attendance at meetings, but the guide was not used strictly. Wherever possible the interviewees were encouraged to move onto relevant topics of their choice and so the interview was kept as free-flowing as possible within the topic area of decision-making in Cape Town. The interviews, which lasted between half an hour and two hours, were taped and later transcribed from tape. All interviewees were told the purpose of the interview (to get their views on decision-making in Cape Town) and it was emphasised that although words would be taken and quoted in publishable documents, the words would not be attributed to them, and so the quotes would remain anonymous. This was done to encourage an open, honest and critical response.

The transcribed interviews were read numerous times and a document was compiled which consisted of quotes on themes which had emerged from the interviews. At this stage it was decided that some themes which had emerged required further exploration, and that the existing interviews did not provide sufficient specific information for use in the SSM methodology. Hence a new interview guide was prepared (see Appendix C.) and a further nine interviews were held (four politicians, four officials and one independent member). Again the interviews were transcribed, and the thematic analysis from the first stage was supplemented with new quotes from the second stage. The full text of the thematic analysis is given in Appendices D. to J.

"Overall the aim of SSM is to take seriously the subjectivity which is the crucial characteristic of human affairs and to treat this subjectivity, if not exactly scientifically, at least in a way characterised by intellectual rigour". (Checkland and Scholes, 1990)

"Users of SSM have to accept this [initial] dousing in subjectivity, and although this is never a problem for those whose inclinations are towards the arts and humanities, it can be difficult for numerate scientists and engineers whose training has not always prepared them for the mixed drama, tragedy and farce of the social process". (Checkland and Scholes, 1990)

5. An Outline of the Soft Systems Methodology (SSM) Approach

5.1 Introduction

The intention of this chapter is to provide the reader with sufficient information regarding the SSM approach to assist in the understanding of the following two chapters. It is not appropriate to give a full description of the nuances of SSM, nor is it the purpose to critique the approach, and so the chapter concentrates on summary statements and figures. The chapter borrows heavily from 'Soft Systems Methodology in Action. P Checkland and J Scholes (1990).'

5.2 Outline of the SSM Approach

"The focus [of SSM] is on an organised set of principles (methodology) which guide action in trying to 'manage' (in the broad sense) real-world problem situations". This thesis concentrates on the application of the methodology. The final step, of implementing actions to manage and improve the situation is outside of the scope of the thesis.

The basic methodology is illustrated in Figure 3 and Figure 4. The basic outline of the model assumed in the approach is that:

- a 'purposeful activity'/'**transformation**' is taking place;
- this activity is the expression of the intention of some person/s who has a particular **worldview**;
- an **actor/s** is/are undertaking the transformation;
- the transformation will have '**customers**', beneficiaries or victims who are affected by the outcome of the transformation;
- the transformation will be affected by elements which are outside of the system - **environmental constraints**;
- there are other individuals who have the power to stop the activity - the '**owners**'.

Rearranging the key elements of this description (given in bold) yields the mnemonic 'CATWOE' which describes one key stage of the SSM process.

Using the production of this thesis as an illustration it is possible to add some meanings to the definitions given above. Hence, the **transformation** (also called the purposeful activity) is the production of a thesis. This activity is the expression of the intention of the author of the thesis, and so all of the text and work which has been undertaken is coloured by the **worldview** of the author. The key **actor** in the production of the thesis is also the author, although the supervisors have played

an important role. The participants in the fieldwork, peers and typists have also been **actors**. The thesis, once finished will (hopefully!) be of benefit to the author, but also the supervisors, the reviewers, future students and decision-makers in transport. These people are classed as '**customers**'. The **environmental constraints** on the thesis production are from three sources: personal, work-related and academic. For example, lack of time due to other pressures is a work-related constraint. The accepted nature of a thesis document as being principally a written document, in a particular format, is another constraint 'imposed' by the academic world. The '**owners**' of the activity have the power to stop it. (Owners can also be actors). The supervisor could reject the thesis; the author could decide to call a halt to it and the university could withdraw funding for it. Hence all three of these actors are also owners.

In the SSM approach, the CATWOE mnemonic is used as a building block to produce a 'root definition', which is a concise verbal definition expressing the nature of the transformation system. In practice, several root definitions are produced, from a number of worldviews, and these are developed into 'models', that is, an expanded written logical expression of the root definition. These models are then compared with perceived reality in a structured matrix format. The objective is not to produce the best or most correct model, but rather *to stimulate debate and insights into the problem*. (See Figure 4.)

In parallel with this 'logic-based stream of analysis' are three further analyses (referred to as cultural analyses):

- Analysis 1: an intervention analysis in terms of client, problem solver and problem owner roles;
- Analysis 2: an examination of the social characteristics of the problem; and
- Analysis 3: an examination of the power related aspects.

Both the logic based and cultural analyses are done iteratively and repeated as necessary. Hence it can be seen that although SSM is rigorous, it also embraces the subjectivity of human situations.

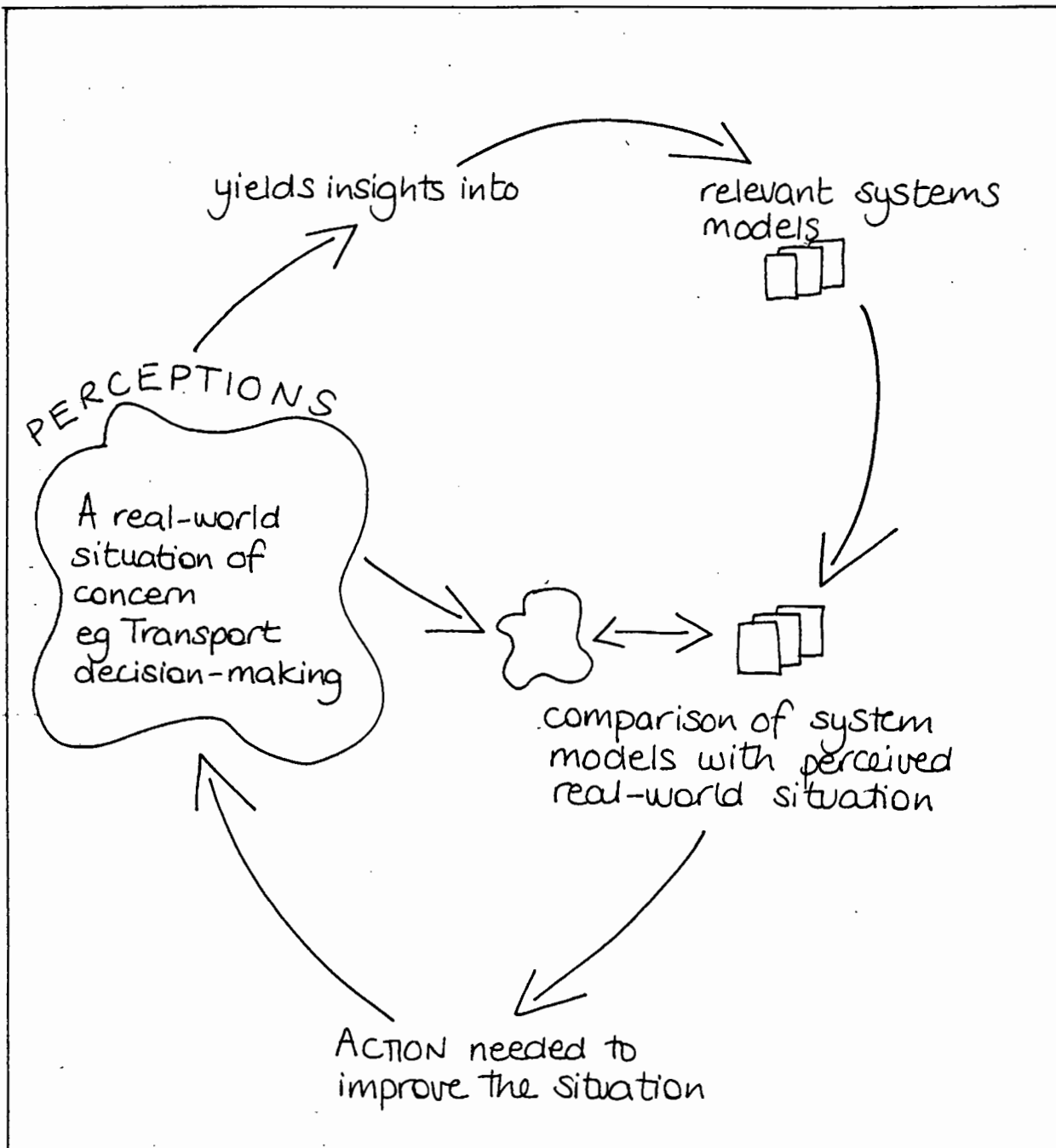


Figure 3 The Basic Shape of SSM

(Taken from Figure 1.3 of 'Soft Systems Methodology in Action, 1990')

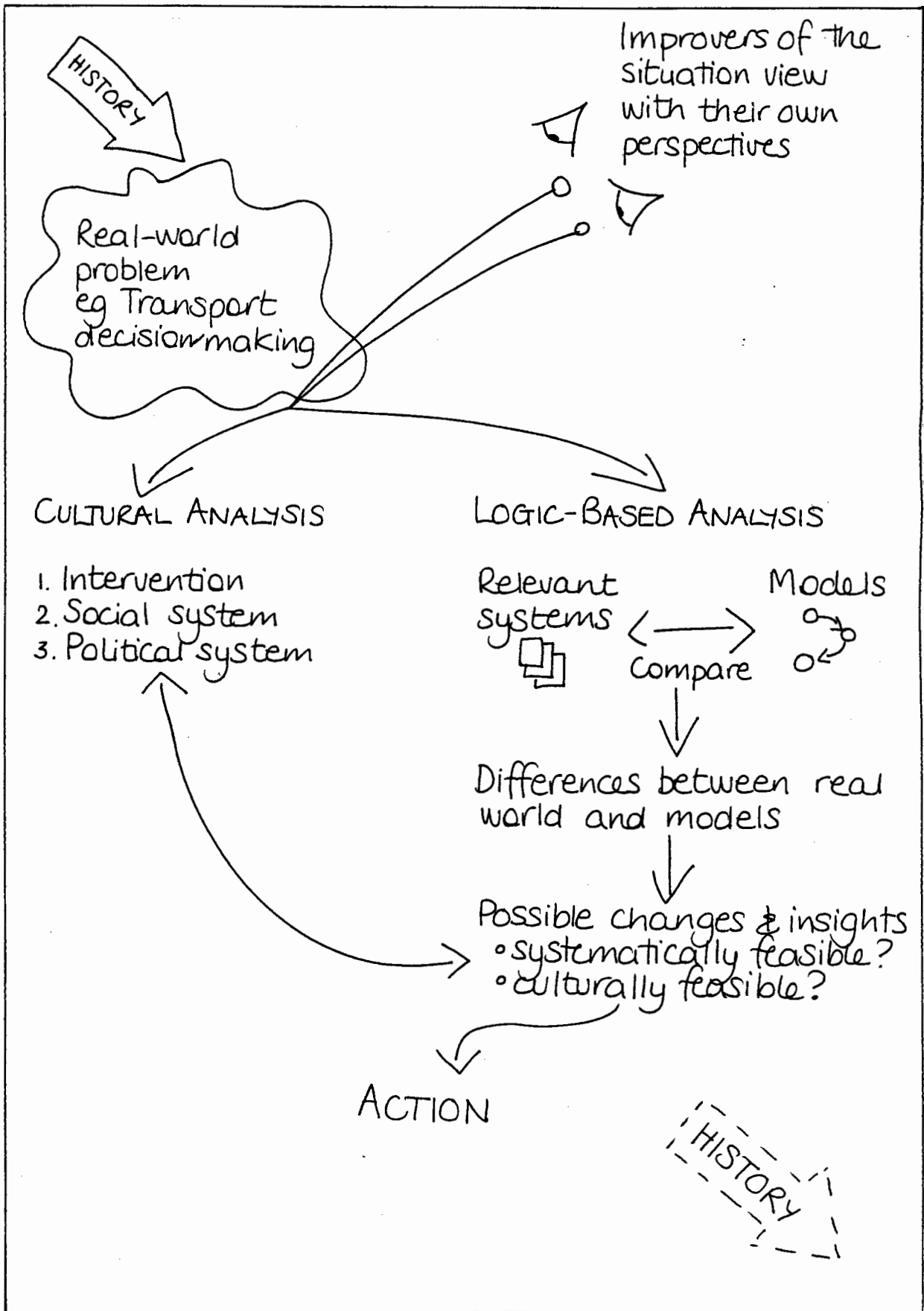


Figure 4 The Process of SSM

(Taken from Figure 2.6 of 'Soft Systems Methodology in Action, 1990')

"The discovery of the wheel was no idle thought.

Or was it?" (K Bradford Brown, 1992)

... "the very best uses of SSM seem always to exhibit a certain dash, a light-footedness, a deft charm. In this sense the role of the approach is akin to that of the cavalry in nineteenth-century war: it can add a certain tone to what might otherwise be a vulgar brawl" (Checkland and Scholes, 1990, p.302)

6. The Rich Picture of Decision-making in Cape Town – Background Information

6.1 Introduction

The prelude to the application of the SSM technique is the arrival at an understanding of the problem at hand. The proponents of the technique suggest the use of 'rich pictures' to both describe the situation, and also to assist in the development of thinking around the problem. A rich picture can be, literally, a drawing which may express relationships and convey the 'feel' of the situation. In this chapter 'rich picture' is defined more broadly to include:

1. *Descriptions of the situation:*
 - *A Chronology of Urban Transport Decision-making in Cape Town (see this chapter)*
 - *An Illustration of the Relationship between Parties involved in Urban Transport Decision-making in Cape Town (see this chapter)*
 - *Changes in Worldview (Perspective) relevant to Urban Transport Decision-making in Cape Town (see this chapter)*
2. *Results of the Questionnaire (see next chapter)*
3. *Themes and Quotes from Fieldwork Interviews (see next chapter)*

This chapter and the next is both a definition of the problem, and also part of the process, since the compiling of these chapters has assisted in development of thinking around the problem

6.2 A Chronology of Urban Transport Decision-making

Introduction

Urban transport policy developments over the last 25 years have been described as undergoing 'fairly wild swings' (Cameron, 1996). The key milestones are described in Table 6.1 and Table 6.2. Some of the main features have been:

- control exercised by a centralised body, initially the National Transport Commission, and latterly the South Africa Roads Board;
- a emphasis in the membership of these boards on expertise in *road* planning, construction and maintenance;
- involvement of rail and bus representatives at local level (Metropolitan Transport Advisory Boards) only;
- no acknowledgement in statutory decision-making of the role of mini-bus taxis.

- at a local level, responsibility for the implementation of metropolitan schemes resting with one area (the 'core city') and latterly with a regional services council.

Of all of the documents described in Table 6.2, perhaps the most important is the Urban Transport Act. The Urban Transport Act (UTA) had the objectives of promoting the planning and provision of adequate urban transport facilities; provide for the establishment of certain funds; providing for the establishment of metropolitan transport areas and metropolitan transport advisory boards, and, finally to provide for the preparation and implementation of urban transport plans

In order to do this, the UTA defined the constituency of a Metropolitan Transport Advisory Board (MTAB) whose duties included advising the Provincial Premier on transport matters, preparing a transport plan, promoting collaboration between authorities in order to achieve a plan and promoting the co-ordination of transport.

Developments in Recent Times

The current decision-making arrangements in Cape Town have developed from a very complex history, which deserves a clear explanation. Prior to the local Government Transition Act of 1994 there were more than 60 Local Authorities in the wider Cape metropolitan area. These government bodies were largely responsible for their own business, although many transport functions were with the Provincial Roads Board, or were undertaken by Cape Town City Council (CTCC) Metropolitan Transport Branch (MTP), as an agency function. Under the Urban Transport Act of 1977 a Metropolitan Transport Advisory Board advised the Province (the key fund holder) on metropolitan transport matters. The Divisional councils and the so-called 'core city' of Cape Town were represented on the Board, along with a number of representatives from the industry.

In 1987 the Western Cape Regional Services Council (RSC) was set up, to try and overcome some of the problems of fragmentation of authorities. The RSC represented the smaller Divisional Councils on the Metropolitan Transport Advisory Board, and formed an early version of the Cape Metropolitan Council (CMC). In the early 1990s there were moves towards the development of an overall metropolitan spatial plan, under the direction of the RSC and CTCC. The first draft of the Metropolitan Spatial Development Framework (MSDF) was published shortly before the abolition of the RSC in 1994, and its rebirth as the CMC. During 1994 and 1995 the new CMC officials reported to a transitional political body, (with *appointed* rather than *elected* members) but their work did not substantially change until after the April 1996 local elections, when a new elected political wing came into being.

Late 1996 and early 1997 was a time of institutional unbundling and re-organisation. The outcome was that the CTCC's Transport branch moved over to become the 'Directorate: Transportation and Traffic' of the CMC in July 1997, and at a similar time the Province resigned their Chair of MTAB, and were replaced by the CMC. Through all of this uncertainty MTAB fell into disarray, and met very little during 1996. It was reconstituted in 1997 and has been operational since then. However, the future of the MTAB seems unclear, as some of its functions are now performed by the Committee on Transportation and Traffic of the CMC, a completely new body of political appointees from the full CMC council. It is possible that its role will be clarified by the new Land Passenger Transport Bill which is expected to become law in late 1998.

In parallel with these later developments was the decision that Cape Town should bid for the 2004 Olympic Games. With this decision, the planning of transport for the city took on a new momentum. A project, called Moving Ahead, to develop a transport plan for Cape Town in the context of a possible Olympic Games, was initiated in mid 1996. The main product from this project so far has been a transport plan for a Cape Town Olympics and a draft Transport Plan for Cape Town. In future a full transport plan document is expected to be produced. The work of the Moving Ahead project has been guided by a Moving Ahead Steering Committee, consisting of representatives from all levels of government and from all transport operators. Although the Moving Ahead project was under the umbrella of Cape Town City Council, who initiated the project, it now rests with the Transportation and Traffic Directorate of the CMC.

Year	Month	Event
1977		Urban Transport Act. Cape Town City Council (CTCC) nominated as "core city", responsible for metropolitan transport issues. Metropolitan Transport Planning (MTP) branch of CT oversees this, together with the Provincial Administration. MTAB set up with Provincial Roads Engineer as Chair. Eleven 'municipalities' and 'divisional councils' were represented on MTAB. These local authorities covered the more affluent areas. The poorer areas had no local representation, but were controlled by central government. MTAB reconstituted every 2 years, with new members appointed
1985		Regional Services Council (RSC) Act. 'Divisional Councils' abolished.
1987		RSC in Western Cape (WCRSC) set up to oversee regional functions, and local municipal functions for precious divisional councils. WCRSC representative sits on MTAB. WCRSC undertakes some agency work for smaller local councils
1989		WCRSC develops Passenger Transport Status Quo Report
1990	June	WCRSC convenes meeting of local planners to discuss possible guideline to urban growth
1990	November	MTP commission Metropolitan Public Transport Study
1991	June	WCRSC, CTCC, MTP and others meet. WCRSC and CTCC agree to co-ordinate on development of MSDF
1992	November	Raymond Ackerman raises Olympic prospects
1993	December	First draft of MSDF - 'The Way Forward'
1994		National elections held, followed by Interim constitution. Local Government Transition Act. WCRSC officially abolished. Transitional CMC in place, with appointed political members. In practice WCRSC carries on with similar function as previously. CTCC remains as core city.
	December	Study proposal for 'Moving Ahead' prepared
1995	February	MSDF second draft
1995	July	Most of country goes to polls for local elections. Urban Transport Amendment Act. New CMC officially becomes core city
1996	March	No quorum at MTAB. Green Paper on National Transport Policy
	April	Western Cape goes to polls for local elections. MSDF technical report published
	May	MTAB cancelled
	July	Unbundling and restructuring of local authority roles and responsibilities starts
	August	'Moving Ahead' study initiated
	September	MTAB cancelled again. White Paper on National Transport Policy
	October	Realisation that CMC is now core city. CT has to hand over role to CMC and is required to apply to CMC for backdated mandate on decisions taken by CT
1996		Cape Town chosen as bid city for Olympics in 2004. Transport Liaison Committee (a committee of officials of transport) continues to function throughout this time. New Transportation and Traffic Committee of CMC formed
1997	Mar	New MTAB constituted. Province resigns the chair and CMC take over
	April	First set of interviews with MTAB members
	May	White Paper on Western Cape Provincial Transport
	July	MTP of CT City Council becomes Directorate of Transportation and Traffic, CMC
	August	Cape Town lose their bid to host the 2004 Olympic Games
	October	Second set of interviews with MTAB members
Now		MTAB advises CMC, not Province. Role of MTAB in question, due to perceived overlap with CMC committee
Future		Cape Town to be used as demonstration project on the formation of a Passenger Transport Authority
		<i>Note: Wherever possible these dates have been verified with documentation or with employees of local authorities. However, this has not always been possible and so this table is an approximate guide to chronology only.</i>

Table 6.1: Recent Key Events in Transport Decision-making in Cape Town

<i>Date</i>	<i>Recent Milestone</i>	<i>Description of Key Features relating to Decision-Making</i>
1971	National Roads Act	Definition of powers, functions and duties of National Transport Commission, and further definition of National Road Fund
1974	Driessen Report	Recommendations for extension of current activities of National Transport Commission to include urban transport Recommendations for establishment of Metropolitan Transport Advisory Council Recommendations for additional funds to be raised for urban transport Recommendations for establishment of an Urban Transport Fund, administered by National Transport Commission
1977	Road Transport Act	Definition of powers of national Transport Commission. Establishment of local Road Transportation Boards with powers to investigate issues relating to the act (mainly concerning the control of road traffic).
1977	Urban Transport Act	Definition of a 'metropolitan transport area'. Definition of a 'core city'. Definition of responsibilities of the National Transport Commission with respect to urban transport. Establishment of an Urban Transport Fund to be administered by the Commission. Establishment of Metropolitan Transport Advisory Boards. Definition of functions of the core city. Establishment of Consolidated Metropolitan Transport Funds
1979	Road Transport Amendment Act	No significant changes
1980	Road Transport Amendment Act	Further clarification regarding membership of local road transportation boards.
1981	Road Transport Amendment Act	No significant changes
1982	Road Transport Amendment Act	No significant changes
1982	Welgemoed Report	
1983	Road Transport Amendment Act	Further clarification regarding membership of local road transportation boards.
1985	Regional Services Council Act	Establishment of Regional Services Councils and definitions of them
1986	White Paper on National Transport Policy	
1988	South African Roads Board Act	Definition of South African Roads Board constituency (the Director-General; 2 officers of the Department of Transport; one representative from Province; one representative from a local authority; 3 representatives from outside of the state sector)
1988	Transport De-regulation Act	Transfer of certain powers and duties from National Transport Commission to South African Roads Board.
1990	Urban Transport Amendment Act	Replacement of National Transport Commission by South Africa Roads Board.
1992	Urban Transport Amendment Act	No significant changes

1993	Interim Constitution	MINCOM and COLTO established to ensure co-ordination between national and provincial governments in the delegation of power to the provinces
1993	Local Government Transition Act	Specification of powers and duties of Transitional Metropolitan councils and local authorities, including metropolitan co-ordination, land-use and transport; traffic matters; arterial roads; public passenger services
1995	Urban Transport Amendment Act	Cape Metropolitan Council becomes 'core city'
1996	National White Paper on Transport	Confirmation of the principle of subsidiarity and devolution of public passenger transport functions, powers and duties to the lowest level of government. Description of a proposed Land Passenger Transport Act
1998	National and Provincial Land Passenger Transport Bills <i>expected</i>	These will replace the Urban Transport Act and the Road Transportation Act

Table 6.2 Key Milestones in South African Transport Policy and Legislation

6.3 Relationships between Key Actors

Despite discussion in the White Paper about delegation of powers, the provincial body still has power over much of the decision-making and fund-raising (although this is likely to change dramatically with the implementation of urban transport authorities, discussed in impending legislation). The Cape Metropolitan Council committees have a relatively new role in decision-making, and the full council have ultimate powers to veto transport decisions. The Cape Metropolitan Council has no authority over the six Municipalities, and so is unable to instigate fundraising measures without the full approval of all six authorities. Technical committees are involved at several stages of the process, and form a means of getting engineering, planning, operator and business input to the process.

6.4 Relevant Worldview Changes

It is widely acknowledged that South Africa is going through a remarkable social and political transformation, from a state where the separation of people on race grounds was sanctioned to one with an humanitarian Constitution based on equity and rights to individuals. In order for the changes to have taken and be taking place there had to be a 'mindset shift' on the part of many South Africans. The old and new mindsets (also called 'worldview' by Checkland and paradigm by others), as described in the transport policy documents, are explored in more detail in Table 6.3.

Changes in mindset also became evident in the interview process. In particular comments were made regarding the increasing co-operation between operators and authorities and a move away from a perceived roads-bias in planning towards public transport.

Hence, the current mindset is a move away from a heavily regulated and controlled system, with a strong national role focused on roads and the support of Apartheid, to a mixed system operating at local level, de-regulated and financially self-sufficient where possible, but with sufficient 'social' systems to support the equitable provision of transport. For the actors involved, this requires a shift away from a controlling role, to a more facilitative, co-ordinating role. It also requires new conceptualisation of the needs of a broader range of socio-economic groups.

<i>Description</i>	<i>Old Mindset</i>	<i>Current Mindset</i>
Orientation of Transport Policy	Previous transport policies were directed towards commuters, essentially the transport of black or coloured workers from the townships and homelands to the workplace	The new policies are more general: "meeting the basic needs of all transport users at affordable, acceptable and equitable levels of service". (Moving Ahead, Cape Metropolitan Transport Policy)
Economic Intent	Previously schemes were evaluated using cost-benefit analyses (CBA) incorporating readily quantifiable aspects	Although CBA is still widely utilised, the National White Paper states that "investment decisions will be taken against a set of criteria which include lifetime cost, economic, social and other returns on investment"
Regulation Policy	Previously bus and rail services were heavily regulated and controlled at a national level. The World Bank in 1991 identified a lack of clearly defined policy: "there is no comprehensive urban transport policy statement....road space for private cars consumes vast resources [yet] government policy in respect of private car use remains relatively undefined"(after Cameron, 1996)	National White Paper: "The intent is to regulate only where it is essential" Presently there are comprehensive policy statements at National, Provincial and Metropolitan levels.

Table 6.3 Changes in Mindset

7. The Rich Picture of Decision-making in Cape Town - Fieldwork Results

7.1 Introduction

It was evident from preliminary interviews that the professional differences between engineers and planners, and between officials and politicians, had previously hindered decision-making. This issue was initially explored by surveying a cross-section of people involved in decision-making, as described in section 4.3. The results of this survey, which contributed to the 'rich picture' of decision-making, are presented here.

7.2 Analysis of Questionnaire Responses

The purpose of the questionnaire was to explore differences in opinion between the two key professions involved in decision-making (engineers and planners), and between government officials and councillors. (Other comparisons, say between engineers and officials were not appropriate, since engineers formed a large proportion of the 'official' group). Hence the response data were divided into sets and various descriptions and analyses of the data were undertaken. Firstly, two summary tables were created:

- The mean number of responses in each category (Table 7.1)
- All questions with a 95% confidence level falling within +/- 0.5 of a score. (Thus identifying the number of questions where the average score +/- 0.5, 1.0 and 1.5 was significant at the 95% level). (Table 7.2)

	<i>Strongly agree</i>	<i>Agree</i>	<i>Tend to agree</i>	<i>Tend to disagree</i>	<i>Disagree</i>	<i>Strongly disagree</i>	<i>Total number of Responses</i>
Councillor	3.08	6.50	5.00	5.25	6.50	3.50	29.83
Official	2.27	7.58	7.03	4.61	5.48	2.76	29.73
Engineer	2.41	9.35	7.06	4.06	5.24	1.59	29.71
Planner	2.62	7.46	5.54	4.46	5.62	4.00	29.70

Note: Total number of responses not exactly equal to 30, as there were some null responses coded as '0'.

Table 7.1 Mean Number of Responses in each Category

	<i>Total number of questions</i>	<i>Number of questions with t-score > 0.5</i>	<i>Number of questions with t-score > 1.0</i>	<i>Number of questions with t-score > 1.5</i>	<i>Sample size</i>
Councillor	30	30	18	4	12
Official	30	30	26	0	33
Engineer	30	30	21	0	17
Planner	30	30	22	8	13

Table 7.2 Summary of T-scores for 95% Confidence Intervals

More detailed tables, and supporting graphs, were also created. These are given at the end of this section:

- The arithmetic mean, and standard deviations of the responses to the questions (Table 7.3)
- The ‘strength’ of the response to each question was described by calculating the percentage of each group who agreed/disagreed. (Table 7.4 and Figure 5)
- The data described using high-low graphs. These graphs show the range of the data as a fine line, and the 95% confidence intervals as a block, around the mean, for each of the interest groups. (Figures 6 – 9, using the data in Table 7.3)
- Significant differences, and significant consensus between the two groups was tested, using a t-test. The results are summarised in Table 7.5.

7.3 Discussion of Questionnaire Results

In general the responses to the questions in the four data sets were not as markedly different from one another as had been expected before the questionnaire was issued. Figure 5 illustrates the general trends, with the engineers in most agreement to the questions posed in the questionnaire the planners indicating a similar profile to the engineers. The councillors demonstrated the greatest tendency towards extreme responses.

Examining the maximum and minimum scores across the questions for each group (in Table 7.3 and Table 7.4) highlights some interesting differences between the groups. Not surprisingly, ‘*Facts are the closest we can get to the truth*’ scores very highly for engineers, with a large percentage agreeing strongly, but does not achieve a particularly high score for the other groups, illustrating the quantitative focus of the engineers. The traditional views of the councillors is starkly illustrated with the two statements ‘*an economically viable transport scheme will also improve the quality of life*’ and ‘*road building leads to job creation*’ attaining scores of 1.8 and 1.9 respectively (amongst the lowest for the whole analysis) with 35% and 25% of councillors agreeing strongly.

The high standard deviations given in Table 7.3 reflect the relatively small sample sizes of the planner and councillor groups. The planners show the highest standard deviations of all four data sets in 33% of cases. Equivalent figures for the councillors are 30%; for the officials 27% and for the engineers only 10%. Interestingly, one of the questions over which engineers are most divided is the statement '*officials have full understanding of politicians and the political processes*'. This division was also reflected in the interviews, with some officials seeming to believe it was the politicians which needed capacity building, others more humbly suggesting that they too may need some education.

The statements demonstrating the widest dispersion of views amongst the sets were:

- For the councillors: In Cape Town, Car travel will always be preferred to public transport travel, for those who have a choice
- For the officials: Car drivers do not pay the full cost of their journeys to society
- For the engineers: All transport schemes should be assessed on the same basis
- For the planners: Public transport is *not* a viable option for most car drivers

Which is intuitively correct as these have demonstrably generated much debate.

The statements demonstrating the smallest dispersion of views amongst the sets were:

- For the councillors: Investment in roads stimulates the economy (most agree)
- For the officials: A problem needs to be quantified in order to be understood (most agree)
- For the engineers *and* planners: Road building leads to job creation (most agree)

The following statements elicited the strongest positive response (with all groups having at least 15% agreeing strongly):

- A problem needs to be quantified in order to be understood
- Decisions should *never* be made by those with vested interests
- Public transport is the choice of most advanced cities in the world
- Road building is *not* a sustainable policy for city transport problems

The following statements elicited the most negative response (with all groups having at least 15% disagreeing strongly):

- I have learnt most of the things I want to learn
- The future will happen, there is little we can do about it
- Everyone should concentrate on the issues of today, instead of the problems of tomorrow.

(See Table 7.4).

The 95% confidence intervals for the groups are illustrated in Figure 6 to Figure 9, and summarised in Table 7.2. Not surprisingly, the groups with the smallest sample sizes (councillors and planners) have the largest t-scores, for 95% confidence intervals, and in the case of the councillors this means that for 8 questions, the 95% confidence intervals are more ± 1.5 scores.

The analysis of the significant differences and agreements between the groups raised some interesting issues. (See Table 7.5). Not surprisingly the councillors disagreed that officials *'have full understanding of the politicians and the political processes'* whilst the officials tended to disagree. Modestly the engineers and planners tended to agree that *'engineers and planners are the experts and so should have the largest say in transport decisions'*, whilst the councillors tended to disagree. This finding has significant implications for the role, and power which each of these parties should take in decision-making. The councillors tend to disagree that *'measuring economic efficiency is the best way of deciding whether a project should be built'*, whilst the officials are not sure either way, only marginally tending to agree with the economic efficiency argument (not surprisingly the engineers tend to agree with the statement, whilst the planners tend to disagree).

The strength of the roads lobby in the lay public is evident from the response to the statement: *'an economically viable transport scheme will also improve the quality of life'*. Councillors agree, whilst officials only tend to agree. When asked to comment on the statement *'road building is not a sustainable policy for city transport problems'*, the councillors tended to disagree, whilst the officials tended to agree. The public transport lobby seems to be gaining some ground as both groups agreed that *'public transport was the choice of the most advanced cities in the world'*, although officials agreed more strongly than councillors.

Both groups disagree with the statement *'the future will happen, there is little we can do about it'*. However, an astonishing 50% of Councillors strongly disagree with this statement, whilst only 15% of officials strongly disagree! (It could be that some officials are hardened cynics, or that the councillors are fresh and optimistic). Both groups disagree with the statement that *'the businessman and the engineer are more important to society than the artist and the philosopher'*, but the planners and the councillors disagree significantly more than the engineers.

The officials and councillors only agree on a few issues. Both agree that *'a problem needs to be quantified in order to be understood'* and both tend to disagree that *'scientific analysis is the worst ways of finding answers to problems'*. This result could explain the underlying popularity of

transport models. Both tend to agree that *'in Cape Town, car travel will always be preferred for those who have a choice'*.

Regarding the assessment of transport schemes engineers and planners both agree that *'an economically viable transport scheme will improve the quality of life'*, but engineers agree more strongly than planners. There is agreement between the engineers and planners that:

- Public transport is not a viable option for most car drivers (both agree);
- Road building reduces congestion(both borderline);and
- Investment in roads stimulates the economy (both agree).

However, engineers tend to agree *that throughout the world professional people prefer to drive by car than travel by public transport*, whilst planners tend to disagree. Similarly engineers tend to agree that *everyone has the right to enjoy the mobility that the car offers*, and *new roads improve quality of life for all*, whilst planners tend to disagree.

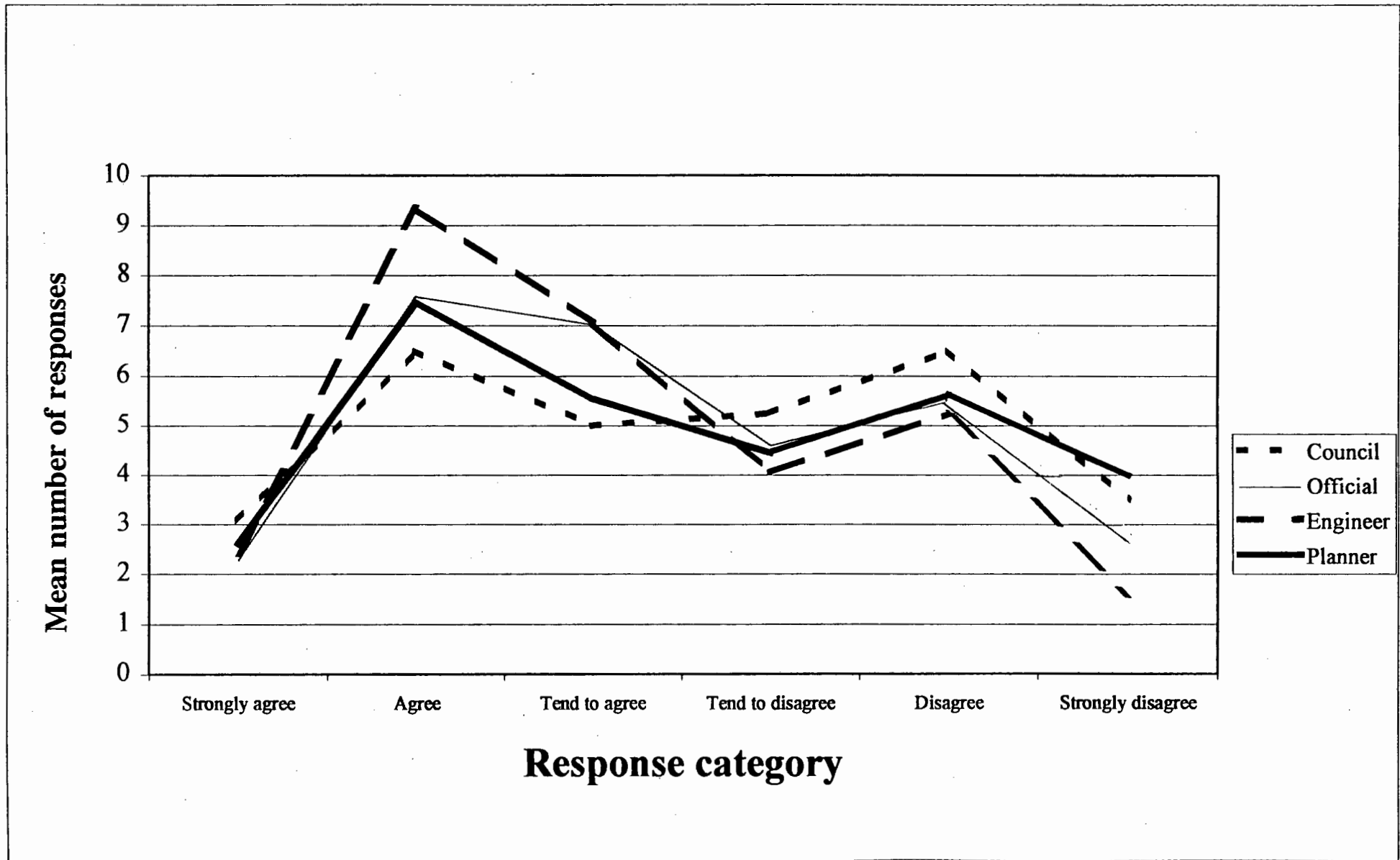


Figure 5 Mean number of Responses in each Category

	Councillor			Official			Engineer			Planner		
	Mean	SD	CI	Mean	SD	CI	Mean	SD	CI	Mean	SD	CI
1. A problem needs to be quantified in order to be understood	2.2	1.4	0.89	2.2	0.8	0.29	2.2	0.8	0.42	1.9	0.7	0.42
2. Scientific analysis is the <i>worst</i> way of finding answers to problems	4.4	1.2	0.79	4.4	1.4	0.51	4.4	1.3	0.68	4.6	1.1	0.68
3. Facts are the closest we can get to the truth	2.3	0.8	0.49	2.4	1.2	0.42	2.1	1.8	0.43	2.6	1.1	0.67
4. Decisions should <i>never</i> be made by those with vested interests	3.1	1.4	0.88	2.6	1.2	0.42	2.8	1.0	0.50	2.85	1.3	0.81
5. Officials have full understanding of politicians and the political processes	4.6	1.0	0.63	3.8	1.2	0.43	3.9	1.3	0.68	3.7	1.2	0.71
6. Engineers and planners are the experts, and so they should have the largest say in transport decisions	4.1	1.2	0.79	3.15	1.2	0.44	2.7	1.2	0.60	2.85	0.8	0.48
7. Measuring economic efficiency is the best way of deciding whether a project should be built	4.25	1.3	0.82	3.5	1.1	0.39	3.2	1.0	0.50	3.7	1.2	0.76
8. An economically viable transport scheme will also improve quality of life	1.8	0.8	0.53	3.1	1.3	0.48	2.1	1.0	0.51	3.2	1.5	0.93
9. All transport schemes should be assessed on the same basis	4.1	1.2	0.79	3.9	1.5	0.52	3.35	1.4	0.75	4.1	1.3	0.76
10. You can classify all people as either honest or crooked	4.3	0.9	0.56	4.15	1.2	0.44	4.0	1.2	0.63	4.5	1.2	0.72
11. Clear cut answers to problems are the most satisfying	2.3	1.0	0.63	2.9	1.4	0.51	2.6	1.3	0.68	3.3	1.5	0.90
12. There are only two kinds of people in the world: weak and strong	4.7	0.9	0.56	4.55	1.2	0.44	4.5	1.0	0.52	4.9	1.3	0.80
13. I have learnt most of the things I want to learn	5.2	0.8	0.53	5.0	1.0	0.37	4.75	1.2	0.62	5.15	1.1	0.69
14. I have the same basic beliefs as when I was at school	5.2	0.8	0.53	4.7	1.0	0.36	4.3	1.1	0.57	5.1	0.9	0.52
15. I have some very strong convictions, which I know are right	2.1	1.2	0.74	2.55	1.0	0.36	2.2	1.0	0.50	2.5	1.1	0.68
16. The future will happen, there is little we can do about it	5.3	0.9	0.56	4.55	1.1	0.41	4.7	1.0	0.54	4.5	1.5	0.91
17. Everyone should concentrate on the issues of today, instead of the problems of tomorrow	5.2	0.8	0.53	5.0	1.2	0.42	4.8	1.0	0.52	5.15	1.5	0.88
18. The businessman and the engineers are more important to society than the artist and the philosopher	5.1	1.2	0.74	4.3	1.2	0.44	4.0	1.2	0.62	5.0	1.0	0.60

Table 7.3 Arithmetic Mean, Standard Deviation and 95% Confidence Intervals of Questionnaire Responses

19. Throughout the world professional people prefer to drive by car than travel by public transport	3.1	1.4	0.88	3.2	1.3	0.45	2.6	1.1	0.58	3.5	1.4	0.84
20. New roads generate extra traffic	3.1	1.6	0.99	2.7	1.2	0.41	2.6	1.0	0.51	2.85	1.5	0.92
21. Road building leads to job creation	1.9	0.7	0.42	2.8	1.0	0.34	2.5	0.7	0.37	2.2	0.6	0.36
22. Public transport travel is <i>not</i> a viable option for most car drivers	3.7	1.3	0.83	3.0	1.5	0.53	2.9	1.3	0.69	2.9	1.7	1.00
23. Road building reduces congestion	3.25	1.6	1.02	3.6	1.3	0.47	3.3	1.3	0.65	3.6	1.5	0.94
24. Investment in roads stimulates the economy	2.3	0.6	0.41	2.6	1.0	0.34	2.4	0.9	0.45	2.3	0.6	0.38
25. Car drivers do not pay the full cost of their journeys to society	2.7	1.2	0.78	3.0	1.5	0.53	2.9	1.2	0.64	2.5	1.6	0.97
26. Public transport is the choice of most advanced cities in the world	3.1	1.2	0.74	2.2	0.9	0.33	2.25	1.0	0.53	2.0	0.9	0.55
27. <i>Everyone</i> has the right to enjoy the mobility that the car offers	2.9	1.4	0.92	3.4	1.2	0.44	3.0	1.1	0.57	3.85	1.5	0.88
28. Road building is <i>not</i> a sustainable policy for city transport problems	4.0	1.5	0.98	2.45	1.2	0.42	2.6	1.2	0.63	2.9	1.6	0.97
29. New roads improve the quality of life for all	3.25	1.2	0.77	3.3	1.2	0.41	2.9	1.0	0.53	3.6	0.9	0.58
30. In Cape Town, car travel will always be preferred to Public Transport travel, for those who have a choice	3.0	1.7	1.08	2.9	1.2	0.43	2.5	1.1	0.58	3.2	1.6	0.96

Note: 1 indicates 'strongly agree', 2 indicates 'agree' 3 indicates 'tend to agree' 4 indicates 'tend to disagree' 5 indicates 'disagree' 6 indicates 'strongly disagree'

The councillor group also included 2 independent members from the business community, and the planner group includes those who described themselves as transport planners.

CI = Confidence Interval

SD = Standard Deviation

Table 7.3 Arithmetic Mean, Standard Deviation and 95% Confidence Intervals of Questionnaire Responses

	Percentage of group agreeing strongly (nearest 5%)				Percentage of group disagreeing strongly (nearest 5%)			
	Councillor	Official	Engineer	Planner	Councillor	Official	Engineer`	Planner
1. A problem needs to be quantified in order to be understood	35	15	20	30	10	0	0	0
2. Scientific analysis is the <i>worst</i> way of finding answers to problems	10	5	5	0	10	25	25	15
3. Facts are the closest we can get to the truth	10	25	25	15	0	5	0	0
4. Decisions should <i>never</i> be made by those with vested interests	25	20	20	15	0	5	0	10
5. Officials have full understanding of politicians and the political processes	0	0	0	0	20	5	5	10
6. Engineers and planners are the experts, and so they should have the largest say in transport decisions	0	5	5	0	20	5	0	0
7. Measuring economic efficiency is the best way of deciding whether a project should be built	0	0	0	0	20	5	0	10
8. An economically viable transport scheme will also improve quality of life	35	5	25	10	0	5	0	10
9. All transport schemes should be assessed on the same basis	0	5	5	10	20	15	10	10
10. You can classify all people as either honest or crooked	0	5	5	0	10	5	0	25
11. Clear cut answers to problems are the most satisfying	20	10	20	0	0	5	0	15
12. There are only two kinds of people in the world: weak and strong	0	0	0	0	15	25	20	45
13. I have learnt most of the things I want to learn	0	0	0	0	40	35	30	45
14. I have the same basic beliefs as when I was at school	0	0	0	0	35	20	10	30
15. I have some very strong convictions, which I know are right	35	10	10	15	0	0	0	0
16. The future will happen, there is little we can do about it	0	5	0	10	50	15	25	25
17. Everyone should concentrate on the issues of today, instead of the problems of tomorrow	0	0	0	0	35	40	25	60
18. The businessman and the engineers are more important to society than the artist and the philosopher	0	0	0	0	40	20	5	40

Table 7.4 Strength of Questionnaire Responses

19. Throughout the world professional people prefer to drive by car than travel by public transport	15	5	10	10	0	5	0	10
20. New roads generate extra traffic	10	15	5	15	10	0	0	10
21. Road building leads to job creation	25	0	5	10	0	5	0	0
22. Public transport travel is <i>not</i> a viable option for most car drivers	10	15	20	25	0	5	0	0
23. Road building reduces congestion	10	5	5	10	10	10	0	15
24. Investment in roads stimulates the economy	10	5	5	10	0	0	0	0
25. Car drivers do not pay the full cost of their journeys to society	15	15	5	30	0	5	0	10
26. Public transport is the choice of most advanced cities in the world	15	25	20	30	0	0	0	0
27. <i>Everyone</i> has the right to enjoy the mobility that the car offers	15	0	0	10	0	5	0	10
28. Road building is <i>not</i> a sustainable policy for city transport problems	10	20	20	15	15	0	0	10
29. New roads improve the quality of life for all	0	5	0	0	0	5	0	0
30. In Cape Town, car travel will always be preferred to Public Transport travel, for those who have a choice	15	5	10	10	10	5	5	10

Note: 1 indicates 'strongly agree', 2 indicates 'agree' 3 indicates 'tend to agree' 4 indicates 'tend to disagree' 5 indicates 'disagree' 6 indicates 'strongly disagree'

The Councillor group also included a maximum of 2 independent members from the business community

Note that the planner group includes those who described themselves as transport planners

Table 7.4 Strength of Questionnaire Responses

Figure 6 Range and 95% Confidence Levels of Councillor Responses to Questionnaire

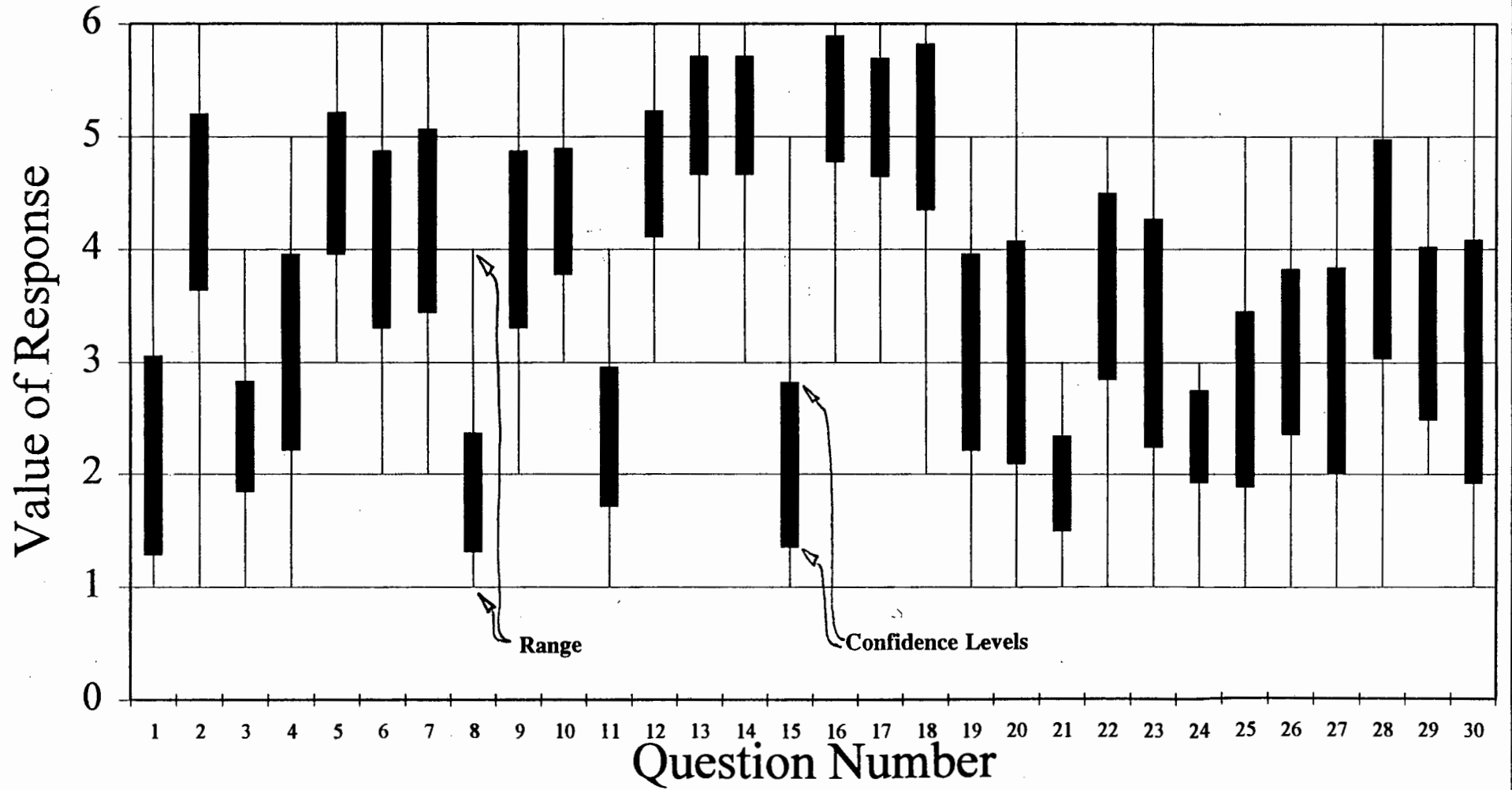


Figure 7 Range and 95% Confidence Levels of Official Responses to Questionnaire

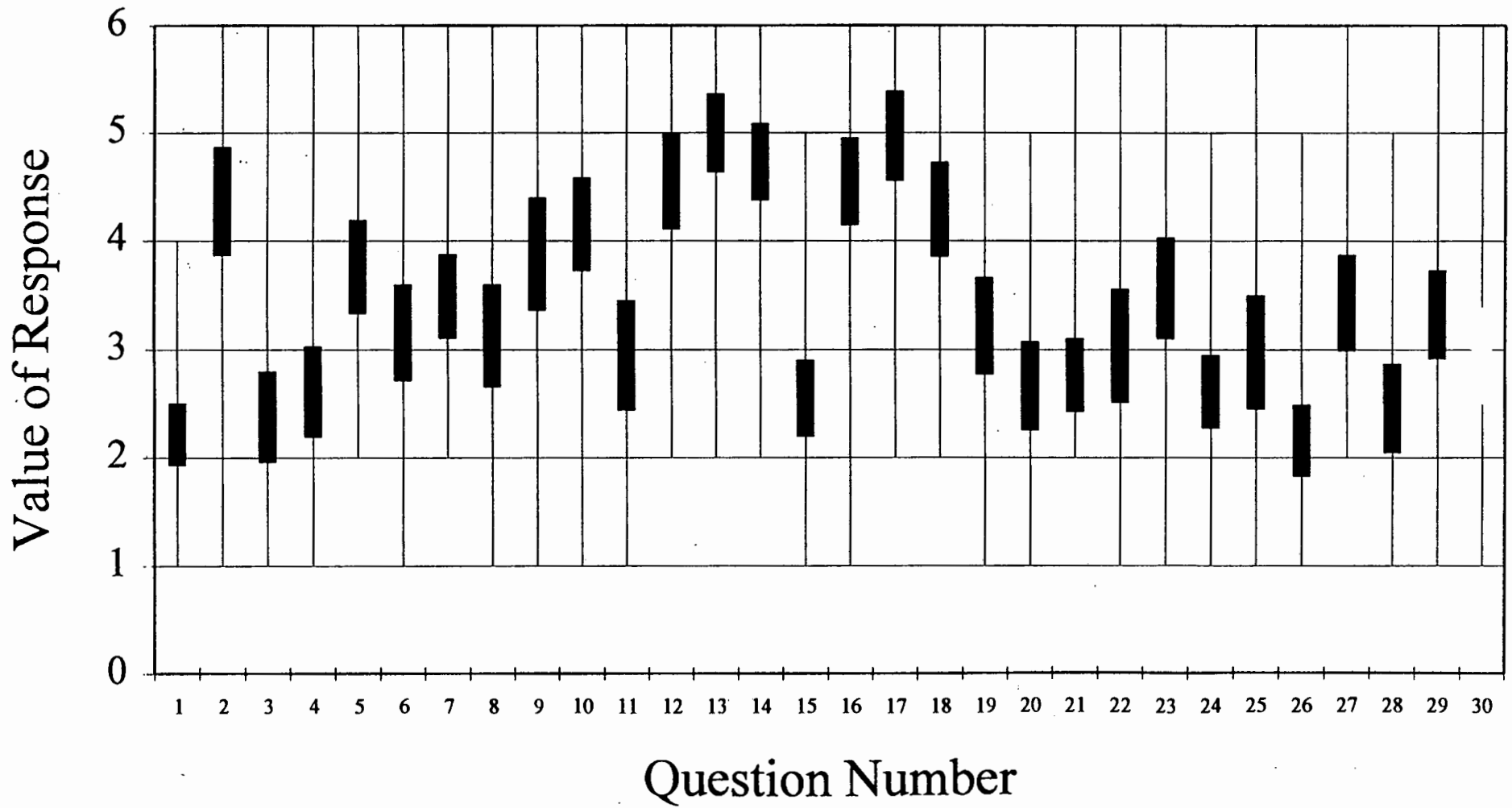


Figure 8 Range and 95% Confidence Levels of Engineer Responses to Questionnaire

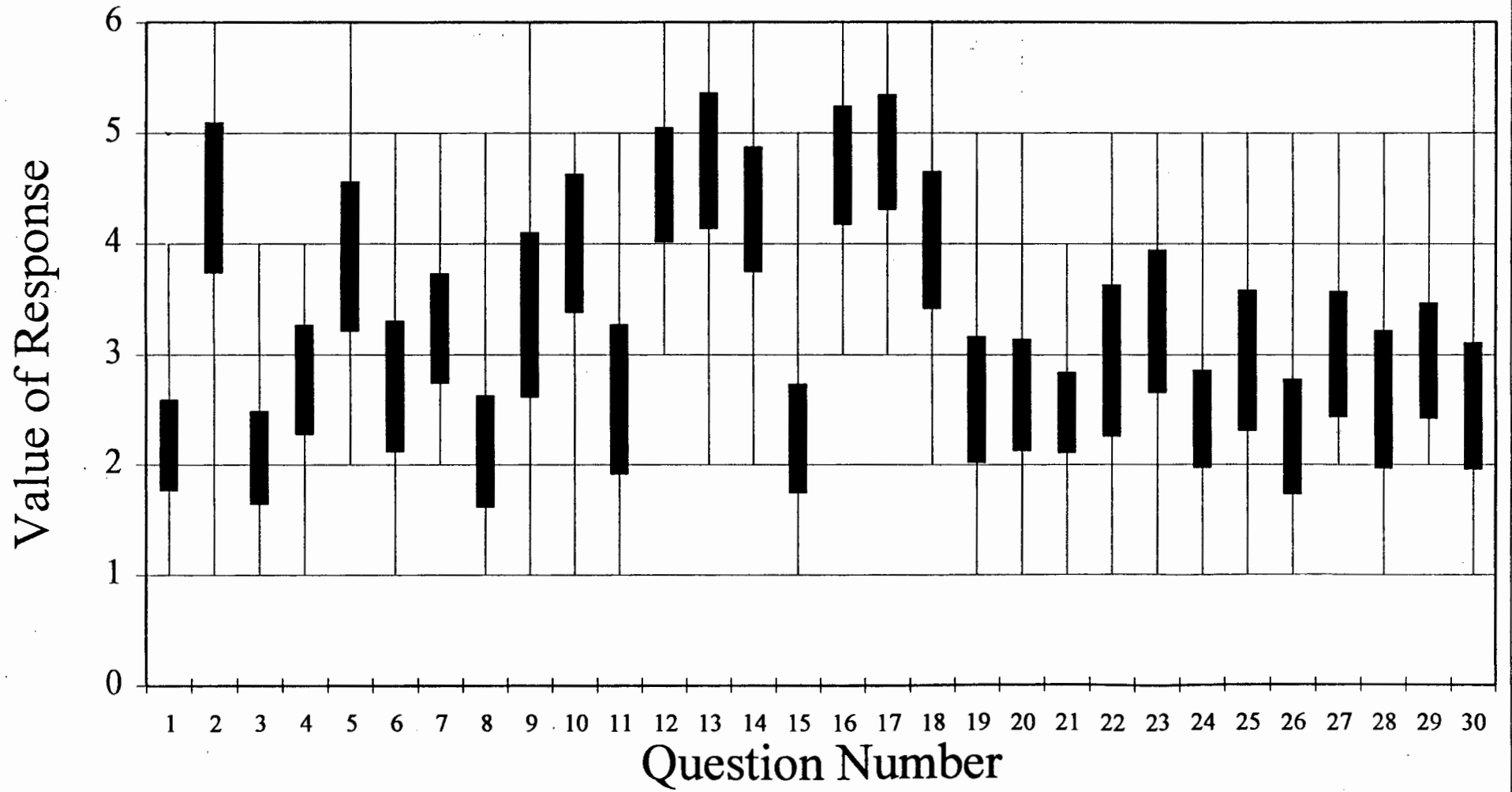
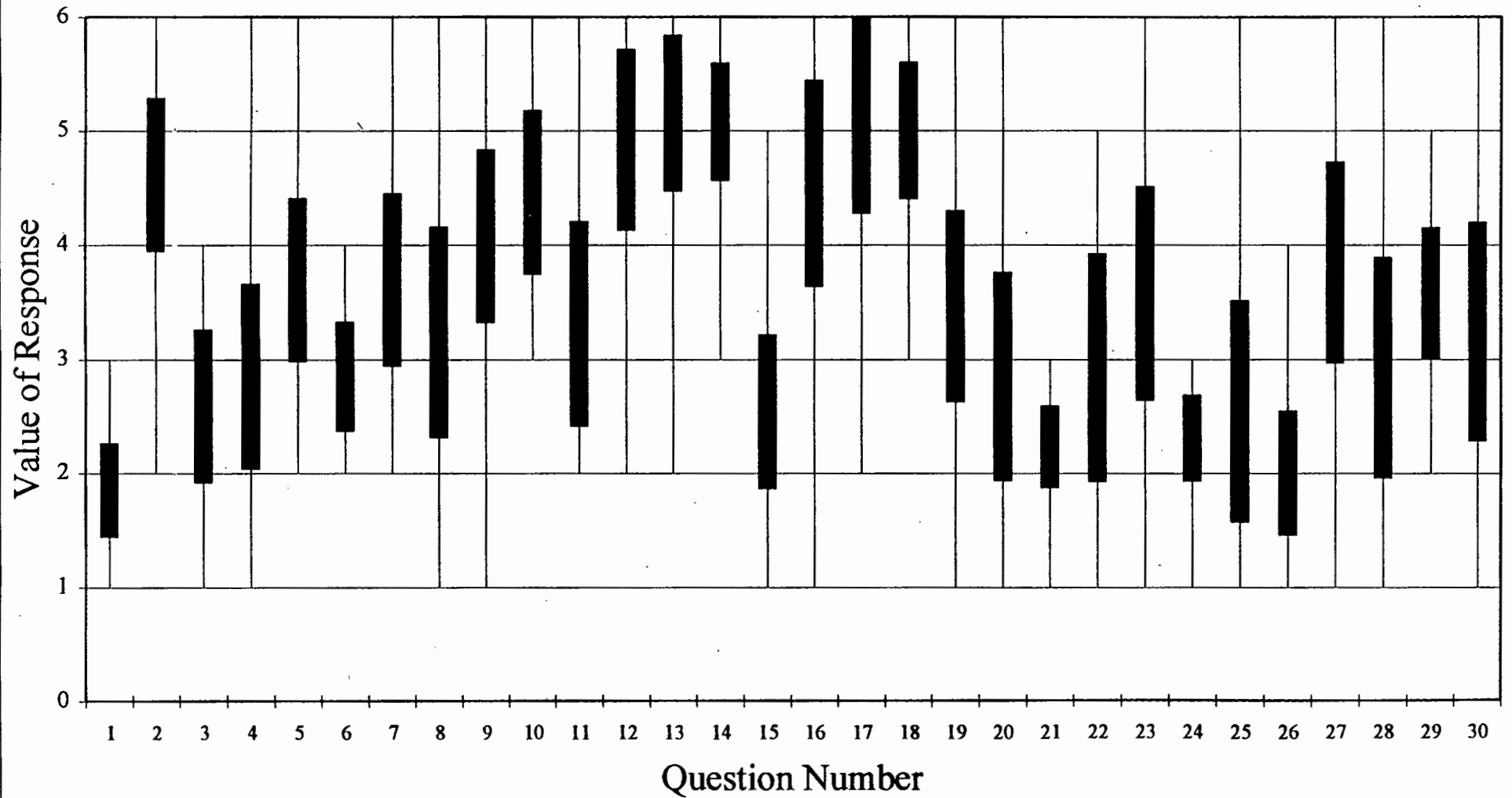


Figure 9 Range and 95% Confidence Levels of Planner Responses to Questionnaire



	Significant difference between...		Significant agreement between...	
	...officials and councillors?	...engineers and planners?	... officials and councillors?	...engineers and planners?
1. A problem needs to be quantified in order to be understood	No	No	YES	No
2. Scientific analysis is the <i>worst</i> way of finding answers to problems	No	No	YES	No
3. Facts are the closest we can get to the truth	No	No	No	No
4. Decisions should <i>never</i> be made by those with vested interests	No	No	No	No
5. Officials have full understanding of politicians and the political processes	YES	No	No	No
6. Engineers and planners are the experts, and so they should have the largest say in transport decisions	YES	No	No	No
7. Measuring economic efficiency is the best way of deciding whether a project should be built	YES	No	No	No
8. An economically viable transport scheme will also improve quality of life	YES	YES	No	No
9. All transport schemes should be assessed on the same basis	No	No	No	No
10. You can classify all people as either honest or crooked	No	No	No	No
11. Clear cut answers to problems are the most satisfying	No	No	No	No
12. There are only two kinds of people in the world: weak and strong	No	No	No	No
13. I have learnt most of the things I want to learn	No	No	No	No
14. I have the same basic beliefs as when I was at school	No	YES	No	No
15. I have some very strong convictions, which I know are right	No	No	No	No
16. The future will happen, there is little we can do about it	YES	No	No	No
17. Everyone should concentrate on the issues of today, instead of the problems of tomorrow	No	No	No	No
18. The businessman and the engineers are more important to society than the artist and the philosopher	YES	YES	No	No
19. Throughout the world professional people prefer to drive by car than travel by public transport	No	YES	No	No
20. New roads generate extra traffic	No	No	No	No

Table 7.5 Significant Differences and Agreement between groups of Decision-makers

21. Road building leads to job creation	YES	No	No	No
22. Public transport travel is <i>not</i> a viable option for most car drivers	No	No	No	YES
23. Road building reduces congestion	No	No	No	No
24. Investment in roads stimulates the economy	No	No	No	No
25. Car drivers do not pay the full cost of their journeys to society	No	No	No	No
26. Public transport is the choice of most advanced cities in the world	YES	No	No	No
27. <i>Everyone</i> has the right to enjoy the mobility that the car offers	No	YES	No	No
28. Road building is <i>not</i> a sustainable policy for city transport problems	YES	No	No	No
29. New roads improve the quality of life for all	No	YES	No	No
30. In Cape Town, car travel will always be preferred to Public Transport travel, for those who have a choice	No	No	YES	No

Note: YES denotes significant difference/agreement at 90% level, **YES** denotes significant difference/agreement at 95% level, **YES** denotes significant difference/ agreement at 99% level, The planners group includes those describing themselves as transport planners

Table 7.5 Significant Differences and Agreement between groups of Decision-makers

7.4 Interview Themes

In order to deepen understanding of the mindsets of key players in the urban transport decision-making process, interviews were held with seventeen members of an important transport committee, (the Metropolitan Transport Advisory Board) and a number of questions were posed. To an extent, the questions were based on the final objective of this thesis, that is to get *the decision-makers'* views on the current approach to decision-making in Cape Town, and so to stimulate thinking on alternatives. However, another outcome of the interviews, due to the open-endedness of the questions, was that a number of themes emerged, for which there was some agreement, either amongst the whole group, or amongst either the officials, or the councillors. (Note that Officials refers to all members who were not elected. A few members of MTAB were representatives from operators, these have been called 'officials, to preserve anonymity. Similarly a few members of MTAB are independent, and these have been grouped with councillors, again to preserve anonymity).

The themes are explored below as a commentary with some illustrative quotes. Appendices D. to J. contain fuller quotes from the interviews.

The Current Decision-Making Process and Possibilities for Change (Appendix D.)

The interviewees were asked whether they had any comments on the way in which decisions are currently made, and MTAB in particular. There was a mixture of support and cynicism towards for MTAB, but cynicism or apathy was the prevailing view.

"I must say that being in the advisory aspect of this thing, I just wonder if we are serving any purpose at all? Because I don't think anybody takes any notice of what they do.." (Councillor)

"Talks, about talks, about talks, Nobody really wants to get down to brass tacks and do the job." (Councillor)

The writer was particularly interested in how the members responded to the formality of committee, and how useful they found the structure to be. (Previously I had encountered politicians complaining about the stifling nature of committees). Generally the older white members had no problem with it, the younger black members were not completely satisfied.

"They are quite formal, I mean we meet officials just at meetings." (Councillor)

"Well, I've yet to see a better system." (Councillor)

"...unless you have a committee system which is fairly formal, it degenerates into a slanging match. There's a very delicate balance in the relationship between officials and politicians and if either become too matey, the whole procedure actually degenerates and is not as effective." (Councillor)

Several of the interviewees mentioned the need for workshops, or a more informal arrangement.

"...maybe the issues as intricate and complicated as would affect the ring-road for instance, need to be debated in a workshop with politicians and with professionals, rather than decisions been made largely in the professional arena." (Councillor)

"We still need to have those formal meetings to get a formal political resolution on which we can act but they will need to be preceded by informal get togethers to thrash out issues..." (Official)

Others noted problems with change or a lack of change:

"Well, I can't say that I have seen any significant change in the way decisions are taken." (Councillor)

"It's a social problem. It is a question of slowly turning these people round, that some fixed ideas are not the norm and need not be only one...because it takes a long time to change people perceptions." (Councillor)

It was interesting to note that both officials and councillors acknowledged that 'road-based' planning was being superseded by a move towards a public transport oriented approach.

"Transport in itself is going to get attention, is going to be upgraded because the people living in this country will slowly realise that the car is out-moded and it has to go." (Councillor)

Power and Leadership (Appendix E.)

When questioned on whether there had been a shift in power, many councillors complained that the officials still held a lot of power:

"I mean the officials basically are not having what I call "new thinking"...so they continue in the old way". (Councillor)

"I think it's important to stress that we're actually hoping to change the way these things operate because what has tended to happen in the past, I'm looking at maybe 5 or more years ago, was the politicians tended to have just very much a rubber stamping mode. Officials determined everything..., the pendulum is swinging the other way. The political power, or the policy power, has to be with the politicians." (Official)

Others noted that there was a change, a move towards a more politicised environment:

"I grew up in a non-political local government system and since it has become politicised it's very different and the politicians are more involved now than they were previously..." (Official)

"...so there's a lot of, in my opinion, undue political influence to try and sway things for some rather vague political objectives." (Councillor)

The officials tended to also note the change of power from Province and National government down to a local level, which politicians did not generally mention:

"But I think that the province might have lost some power at the bottom and that filtered down to us...." (Official)

Interviewees were questioned on the importance, in their view, of good leadership. The respondents were unanimously agreed on its importance, and on the fact that it was not in place at present:

"I must be frank with you.....You've got potentials, but I don't believe you've got champions of cause. Every cause that succeeds needs a champion. So you need somebody who fervently, obsessively believes in something and he or she preaches it on every turn in the road." (Councillor)

"I don't think we've got many of those politicians who want to become sort of immortal having implemented the MSDF or something like that, they are too scared of that sort of thing. They rather focus more on their parochial interest." (Official)

"Well, I think it's important but I'm not quite sure who should be providing this strong leadership. I think we don't know where it's going to come from at this stage." (Official)

Interestingly the officials interviewed tended to look for political leadership. One politician looked to the officials for guidance:

"Every now and again you find a dynamic official....but I don't think we've got anybody like that (Solly Morris – a previous City Engineer) now and it's probably one area where there is a lack that there isn't any charismatic individual who's going to lead this process. Not what I've seen." (Councillor)

Individuals in both groups thought that a group may provide guidance:

"I believe in collective leadership because of the various sort of strands and strengths that are requisite, it is unlikely they can be embodied in one person so you need that leadership. In this case officials, top officials and councillors. (Official)

The Official – Politician Relationship (Appendix F.)

The first set of interviewees were asked several questions relating to the role of politicians and officials, and the relationship between them. On the role of councillors and officials, there were widely mixed opinions. Some felt that the politicians should have more involvement:

"(The official) is supposed to take (the) councillor in charge of the committee to brainstorm, to plan (meetings) ahead....(They should ask) "What are the critical issues? What do we need to discuss? Can you go back to the caucus and come up with the issues with things that are the key issues?" I fail to see if that thing is happening...." (Councillor)

"What you got at the moment is a cadre, an elitist core, of transport planners, and I think most of the critical decisions are made by them. Alright, you have planners interacting with them but essentially they see themselves as an elitist core. I think the thing of planning as far as transport is concerned needs to be far more accessible to politicians and to the public." (Councillor)

"I think that time has now come that we should train officials in becoming aware of the new system and what a democratic system really means, and how they have to listen to what the public want." (Councillor)

"I think that the way through this is that the... decisions shouldn't be made at a technical level independent of the politicians. Politicians should get involved at an earlier stage." (Official)

Others believed that there should be less involvement from the politicians:

"Politics are getting too close to the, I won't say Officialdom, but let us say, the 'Technics' of the business that we deliver." (Councillor)

"Unfortunately today, you find that many politicians want to intervene in things that they should not be intervening in. They want to get involved in all kinds of decisions that really should be left to officials. In other words, people that are expert in the field." (Official)

"... it is going to be the technicians who have the aplomb to drive that process through or to convince the politicians. The politicians just become a spokesperson on a rubber stamp if he is not sold in one direction or another." (Official)

Others were more reflective about the new environment, and positive about the way ahead:

"Now if (a politician) starts questioning me about administrative things I have to accept that that is part of the checks and balances, you know. I'm accountable to him as an elected politician, and you know I have to accept that. You know its just one of those things. If you're living in a political environment you have to accept that." (Official)

"...I think (the politicians) are perhaps a little bit too involved. At this point in our country I think its necessary and I don't resent it at all." (Official)

"We're tending to use a 'member-led officer-driven' (approach). We call it 'councillor led and official driven', where the politicians and their officials actually form a team in developing policy which is then been approved by the politicians and then implemented by the officials. It's meant that the interface between the officials and the politicians has become much closer and almost more vague, a bit blurred almost." (Official)

The issue of trust between officials and councillors came up several times:

"Yes, I think that mostly I can say 75% we trust them." (Councillor)

"(Yes, from a generalised point of view you know) sitting on a thing like the metropolitan transport advisory board as a councillor, you're very much told what the officials want you to hear and I'm aware of that.....very often you get the feeling you're not making real decisions you know. Sadly." (Councillor)

"Politicians only really become enthusiastic about participating in something, if there is something in need for them. Well them or their area. If they can see some spin-offs for their Constituency." (Official)

"(in the early days of the new government) there had to be some sort of trust built up between officials...and their politicians. Not that it was going all that smooth, I remember some of these politicians...they used to bring their body-guards and confidants and so on, and these guys would be their advisors, never mind all these officials. They did not trust them (the officials) actually, they would only trust the guy who had a gun in his holster. No it has changed a lot..."(Official)

Surprisingly few interviewees mentioned party politics. The two councillors who did considered it to be unimportant. One official had a rather different view!

"Politics, if a person is really sincere about his input here, politics should not come into it. It is his input into this for the betterment of the environment area that you live here and for the people." (Councillor)

"I think at the end of the day they want to look after the interest of their Constituencies and of their parties. And so they play the big politics and the small politics at the same time." (Official)

Cynicism, Apathy and Frustration (Appendix G.)

General frustration, particularly amongst politicians, was expressed at the lack of progress in decision-making:

"...one gets the feeling that so much in the transport field, it's no decision, no decision and then by, as I say" we've had a report"... time passes then they say" well we had better get another report",

and that seems to be the area where they spend, although we've had cuts in transport budgets etc, the one apparent area where least cuts, is the report getting area." (Councillor)

"People don't appear to be able to tell them "look by the end of next month you have to make your decision. The things just run on and on. I don't know maybe there is not enough sort of authority tree, a structured authorisation of who does what and where." (Councillor)

"Half of the time, I don't know which are the officials, and which are the politicians. But there is no decision making process at these meetings." (Councillor)

"Well, I think, I get the feeling there is quite a bit of apathy in a sense. Politicians are not as fired-up and keen to participate at meetings like MTAB anymore. I don't know whether it is just a reflection on MTAB or if it is wider, because people are more busy and have not got time for so many meetings." (Official)

Some blamed this on the lack of funding:

"Look, it is a great problem in the fact they have not got enough money. They are working with a very restricted budget and a constantly more restrictive and restricting budget. So, the priority schedule has to diminish, I don't know. Everybody re-examines the schedule and they come out with a new priority schedule and then next year there is less money so they re-examine this schedule and come out with a new schedule..... In the meantime more studies are made. I suspect that it is jolly good for the consulting engineers." (Councillor)

"I think the lack of availability of funds and the inability to resource funds, has made people very hesitant about commitment with regard to projects. (Official)

Frustration at the lack of powers, particularly with respect to Province, was expressed by officials. This was supplemented by comments about confusion over responsibility.

"I think the Province still is the most powerful Transport Authority and I think they want to remain so. Despite all the talks of delegation of powers." (Official)

"I detect, my experience is, that there is still a lot of conflict in terms of responsibility which is inhibiting the decision-making process" (Official)

"The different officials network, and get agreement and understanding "that's how things should go". If you have already agreed with the Province of 'that's how things should go', then it will be very difficult for (officials) to change, because of pressure from politicians. Politicians (should be) part and parcel of, I think, identifying the problem and you know setting the agenda...." (Councillor)

The Legacy of Apartheid and the Capacity of Councillors (Appendix H.)

Particular questions were raised regarding the content and form of meetings, and these questions gave rise to comments from several on the 'capacity' of councillors.

"Many of the reports that are placed before MTAB as I read at the moment, may well be unintelligible to many of the political appointees." (Councillor)

"People, they don't have to use technical jargon when they are presenting reports to Councillors (because). Councillors will not understand unless they have maybe a background in transport." (Councillor)

"There is not enough analysis and not enough synthesis to actually put (it- the technical material) in an understandable form for those councillors who are not technically minded." (Councillor)

"You can't really ask questions if you're not familiar with the subject matter...." (Councillor)

"But there are some others that really I think don't know what's going on and are perhaps frightened to say so - to ask for explanations" (Councillor)

"The level of unsophistication is frightening." (Official)

"I find it very worrying, because then you can have a situation where a fairly simplistic solution to something may sound very nice understandable and that is the way the politicians go. But somewhere along the line you know there maybe enormous hidden costs that ..." (Official)

Some also mentioned the need for the capacity-building of officials, particularly in the understanding of the new system:

"I think that time has now come that we should train officials in becoming aware of the new system and what a democratic system really means, and how they have to listen to what the public want. And yes, in the end we (the Councillors) make the decisions." (Councillor)

"Well look there's always room for education (of officials). We all have a lot of spare capacity between our ears." (Official)

A few people went on to comment on the legacy of Apartheid on the skills of new councillors, and on the operation of the process.

"You know, whether you come from the Black or Coloured Area you don't have any knowledge of how the workings are of the council." (Councillor)

"...and now I am talking politics, that we have more or less still a white government in the Western Cape. The biggest disadvantage is that we are still relying on expertise and on people trained in the old era." (Councillor)

"Of course if you do some studies here, you'll find some horrific things as a result of the past, which as far as some of the politicians are concerned, they don't want to do that. They really don't want to know, and this is bedevilling a more frank and open approach to planning because they keep on

seeing it as a reflection on the past regime and so on. So there's still quite a reluctance to get involved in things like knowing the actual composition of the poor and exactly how poor they are."
(Councillor)

Information and Agendas (Appendix I.)

There was strong agreement that the agendas provided for the councillors were too long, and often over technical.

"We are called upon by law, to make informed decisions and the biggest resentment at the MTAB for instance, is that I feel that if you dish out a lot of papers when councillors come into a meeting and throw a lot of new projects their desks in the form of loose sheets, then I cannot make an informed decision..."(Councillor)

"...I feel this vast amount of information that has been given in advance actually works against decision making, not helping it."(Councillor)

"I expect I am no different to anybody else, I certainly don't sit down and read the whole bloody thing." (Councillor)

Many acknowledged the problems, but some struggled to see a way around them.

"I mean the more informative you want to be the more information you put on the table, the more you confuse the decision makers and the politicians." (Official)

"I think they (the councillors) have found (the system) bureaucratic and cumbersome and frustrating - they do - because they are well aware of the fact that the agenda is at the mercy of the officials, and for them to try and get things on the agenda was, in the past, not necessarily easy." (Official)

Transport Terminology - A Common Language (Appendix J.)

On the issues of vision in transport planning there was wide acknowledgement of its importance, but widely varying views over what it should be, and whether it existed. With some exceptions, the officials tended to look to longer time horizons than the councillors.

"..I would say 5-6 years" (Councillor)

"(A vision is) very, very important because actually it illuminates your path, forms where you are going, gives you a clear direction. (It should be for) 15/20 years." (Councillor)

"I think that one must have a vision. (It should be) no longer or advanced than say 5 to 7 years."
(Councillor)

"10 years is the maximum I would choose.." (Councillor)

"(A vision is) crucially important...Minimum? 50 years." (Councillor)

"...probably a 5 year time span, where you plan with some degree of confidence." (Councillor)

"I think it's extremely important...I don't think one should have one that will last for the next 20 or 30 years, that isn't possible." (Official)

"Vital, absolutely vital....20 to 25 years, that is what we define as long term." (Official)

"I don't think we can plan much further than 15 years ahead". (Official)

..it (the plan) has to have a macro vision 20-30 years" (Official)

This raises an interesting point about words such as integration, multi-modal planning, vision, strategy. Words such as these are used liberally, but is there any agreement about what they mean? Unfortunately an explanation of this issue is outside the scope of this thesis.

The interviews took place in the wake of the publication of the Metropolitan Spatial Development Framework (MSDF), a planning framework for Cape Town, and the development of the 'Moving Ahead' plan, instigated by the Transport Directorate of the Cape Metropolitan Council. Hence, when asked whether a vision was in place, the replies were rather surprising....

"I would say for the short and medium term because I think for example the budget for the Olympic related project 4 to 5 years or so was up to 2000 or something but I don't think currently there is a vision in place beyond that." (Councillor)

"I believe there is a vision but I don't think it is coherently put together as I would want to see it. I think then we would've had it in a document, that vision being spelt out to the public." (Councillor)

"There are lots of little bits of paper around with various visions, you know Cape Town city council had them and the CMC done a few exercises, and there's a lot of paper." (Councillor)

"I think to answer that absolutely, honestly, yes there is a vision ."(Councillor)

"At the moment it is in a kind of a wishy- washy-whoosh-thinking about it but its not formulated and down on paper and here we go let's run - that's where we're going." (Councillor)

"I think we are getting it in place. I don't think it is fully there yet, as I intimated earlier, but the general trend is to say 'let's have a long-term vision.'" (Official)

"(The vision is not in place yet). No, not yet. Slowly its forming." (Official)

Whilst there was a wide variety in the scope, length and responses in the interviews, the above report clearly indicates several areas of consensus on issues. These issues are considered further in the following chapters.

"if a reader tells the author 'I have used your approach and it works', the author will have to reply 'How do you know that better results might not have been obtained by an ad hoc approach?' If the assertion is: 'The methodology does not work', the author can reply, ungraciously but with logic, 'How do you know that the poor results were not due simply to your incompetence in using the methodology?'" (Checkland, 1972, p.114)

8. Applying the Soft Systems Methodology (SSM) to Decision-making in Cape Town

8.1 Introduction

This chapter describes the application of SSM to urban transport decision-making in Cape Town, using the guidelines in the book 'Soft Systems Methodology in Action' (Checkland, 1990). Although the application is reported here as a formal chronology, in reality there were several iterations. Some rough ideas were followed later (sometimes months later) by refinements and new ideas. Comments on the difficulties encountered with the approach are given in Section 8.6. The action plan which was gleaned from the analyses is reported in Chapter 9.

8.2 The Logical Analyses

The steps followed for the logical analysis stage of the SSM are illustrated in Figure 10 and the actual analyses are given in Figure 11-Figure 16. Step 1 was to define relevant systems for investigation. After some preliminary work examining different systems in the transport decision-making field, six systems were identified which appeared to merit further investigation. In theory a large number of systems could be examined, but there were constraints on time and so those chosen were sufficiently different that a variety of insights were expected to come from them:

1. The MTAB committee as a system for disseminating information, with the officials as clients (Figure 11)
2. The MTAB committee as a system for obtaining a political mandate, with the officials as clients (Figure 12)
3. The metropolitan transport branch as a system for allocating funding, with the public transport operators as clients (Figure 13)
4. The MTAB committee as a system for disseminating information, with the councillors as clients (Figure 14)
5. The MTAB committee as a system for making decisions, with the committee members as clients (Figure 15)
6. The metropolitan planning branch as a system for meeting transport needs, with the general public as clients (Figure 16)

Having identified the relevant systems, step 2 was to describe them using the CATWOE mnemonic:

Customer:	the victims or beneficiaries of the Transformation
Actors:	those who would do the Transformation
Transformation process:	the conversion of input to output
Weltanschauung:	the worldview which makes this Transformation meaningful in context
Owner(s):	those who could stop the Transformation
Environmental constraints:	elements outside the system which it takes as given

Using the six CATWOEs, the 'root definitions' succinctly defining the system under review, were developed (step 3). Taking the root definitions as starting points, the six systems were modelled, that is, a set of activities were identified which could logically lead to the transformation and a successful output (step 4). These sets of activities do not purport to be a description of the real world, but they are logical and technically feasible activities which are relevant to a debate on the real world. The activities are analysed by asking the following questions of each element of the model:

- Does it exist or not in the real situation? (step 5)
- How is it done? (step 6)
- How is it judged? (By what criteria and judgements) (step 7)
- Comments, ideas about alternatives, ideas about 'how'

Finally the whole is judged by asking whether the system demonstrates:

- Efficacy (does it work?) (step 8)
- Efficiency (is output greater than resources used?) (step 9)
- Effectiveness (is the Transformation meeting the longer term intent?) (step 10)

Step 1: Identify the system/s of interest

C : Step 2: Identify the 'CATWOE'

A : for this system of

T : interest

W :

O :

E :

Root Definition

Step 3: Make the root definition from the CATWOE

Model	Exist or not?	How is it done?	How is it judged?	Comments
Step 4: Using the root definition, describe the stages in the model required to achieve the root definition	Step 5: Test the defined model against reality	Step 6: Query the defined model	Step 7: Further query the defined model	for steps 4, 5, 6 and 7, there may be 'insights' gleaned.
Efficacy	Step 8: Does the model work?			
Efficiency	Step 9: Output > resources used, for the model?			
Effectiveness	Step 10: Does the model meet the intent?			
* Steps 1-10: View the model and reality with clear perspectives *				

Figure 10 Steps of the Logical Analysis

1. The MTAB committee as a system for disseminating information, with the officials as clients

- C : officials
- A : all those developing & requiring to receive information
- T : information not disseminated
→ information disseminated
- W : "it is necessary to disseminate information"
- O : official senior managers
- E : new political decision-making replacing a 'rubber-stamping' mode

Root Definition

A system which allows officials to disseminate information to all those requiring it, and involving all those developing information. The system is controlled by the seniors managers of officials, in a new political decision-making environment, replacing a previous 'rubber-stamping' mode, with the belief that it is necessary to disseminate information.

Model	Exist or not?	How is it done?	How is it judged?	Comments
1. Decide info. needs to be disseminated	Sometimes	Discussion ^{respond to}	Not	1. Data-collection based on historical habit? Sequential surveys may be useful. Guidance needed? 3. Could ask for judgement from politicians.
2. Collect info.	Yes	Surveys	Not	
3. Present info.	Yes	Varies	Not formally	
4. Monitor process	No	-	-	
5. Define measures of performance	No(?)	-	-	
6. Take control action	No	-	-	

Efficacy : Information may be better disseminated through other means than committee paper

Efficiency : Meetings take time & maybe purpose should be more strictly defined, controlled more tightly, to aid efficiency

Effectiveness: Is intent to inform politicians? If so - failing - too much information given of poor quality

Figure 11 Logical Analysis 1

2. The MTAB committee as a system for obtaining a political mandate, with the officials as clients

- C : Officials
- A : Councillors & officials
- T : mandate not in place
→ mandate in place
- W : councillors should be involved
with decision-making
- O : councillors
- E : still a new political environment for
many officials

Root Definition

A system for obtaining a political mandate from councillors which allows officials to do their job. The officials now believe that councillors should be involved with decision-making, although this is still a new environment for many officials

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Model	Exist or not?	How is it done?	How is it judged?	Comments
1. Identify problem/s	Yes	Historical/ ad-hoc	Part evaluation Part political	Apparently systematic but actually ad-hoc? Perspective is key at this stage Criteria depend on officials Often technical, should include some education aspects?
2. Define solutions	Yes	Ditto	Ditto	
3. Evaluate solutions (formally)	To an extent	Ditto	Ditto	
4. Present solutions	Yes	Variable	Not	
5. Decide on best course of action	Yes, incremental	Meetings	Elections	Some improvement possible? Planning Guidelines have a role to play
6. Monitor decision	Yes	Data	Not independent	
7. Define measures of performance	To an extent	Efficiency criteria	Not	
8. Take control action	Ad-hoc	Ad-hoc	Political	

Efficacy : Yes

Efficiency : 'Engineering Method' developed over many years - reasonably efficient?

Effectiveness: Meeting the intent of the officials - yes. Meeting the intent of the councillors - not yet

Figure 12 Logical Analysis 2

3. The metropolitan transport branch as a system for allocating funding, with the public transport operators as clients

- C : public transport operators
- A : transport authorities & public reps.
- T : lack of funding for infrastructure -> funding for infrastructure
- W : funding for public transport will improve the transport system
- O : national & provincial government
- E : taxi violence, lack of trust & co-operation, lack of revenue-making opportunities for local government

Root Definition
 A system for the allocation of funding for infrastructure to public transport operators involving the transport authorities & public representatives & constrained by national & provincial government. The system operates within an existing committee, to a background of taxi-violence, lack of trust & co-operation & lack of revenue-making opportunities for local government, with the intent of improving the transport system.

Model	Exist or not?	How is it done?	How is it judged?	Comments
1. Identify infrastructure needs	Yes	?	Users	} Largely informal
2. Present needs to funder	Informally	Word-of-mouth	Not	
3. Needs met	Sometimes	Gov. decision	Users?	
4. Monitor funding needs	Ditto	?	Not	
5. Define measures of performance	Not	Not	Not	
6. Take control action	No	N/A	N/A	

Efficacy : Not all funding needs met through local government
 Efficiency : Goodwill from local government leads to high efficiency
 Effectiveness: Funding of infrastructure is met to an extent - but what about operations?

Figure 13 Logical Analysis 3

4 The MTAB committee as a system for disseminating information, with the councillors as clients

- C : councillors & interested members of committee
- A : those producing & receiving information
- T : uninformed people
→ informed people
- W : dissemination of information is necessary for the development of transport
- O : the officials who disseminate information, and those who pay them
- E : Structure of committee & legislation defining it

Root Definition
 A system operated by senior officials and those who pay them to inform MTAB committee members, in particular councillors, through the dissemination of information at MTAB meetings. The meetings operate within existing structures, defined by legislation, involve officials producing information and serve councillors and other interested members of the committee, with the intent of developing transport

Model	Exist or not?	How is it done?	How is it judged?	Comments
1. Lack of information identified	Yes	By official & council awareness	Not	Are councillors aware of availability
2. Information requested	Yes	Meetings/letters	Ditto	
3. Information given	Yes	Various	Feedback	Feedback rarely given?
4. Information needs monitored	No	Not	Not	
5. Measures of performance defined	No	Not	Not	
6. Take central action	No	N/A	N/A	

Efficacy: : Produces information but slowly. Councillors need to be more pro-active with requests?

Efficiency : Not very producing ad-hoc data.

Effectiveness: Poor relationship between officials & councillors over issue may negate effectiveness

Figure 14 Logical Analysis 4

3 The MTAB committee as a system for making decisions, with the committee members as clients

- C : all committee members
- A : those on committee, and lobbyists
- T : no decision → decision made
- W : decisions are needed in order to develop transport
- O : public who elect councillors and government who pay officials
- E : committee structure and legislation

Root Definition
 A system for decision-making which serves all those on the committee but also involves lobbyists. The system is owned by the public, who elect the councillors and the government who pay the officials, and operates within existing committee structures, informed by legislation, in order to develop transport

Model:	Exist or not?	How is it done?	How is it judged?	Comments
1. Problem identified on agenda/report	Yes	By officials	Not	Proactive councillors needed
2. Problem presented	Yes	Ditto	By councillors	Judgements, but no feedback → → disillusionment
3. Problem debated	Yes	In committee	Not	
4. Decision made	Yes	Vote	By electorate	
5. Decision monitored	Informally	By electorate	Not	
6. Measures of performance defined	Sometimes	Key perf. ind.	Usually not	
7. Take control action	No	N/A	N/A	

Efficacy : Produces decisions, but are they in the right areas?

Efficiency : Judgement of efficiency depends very much on individual perspective

Effectiveness : Meets Intent of officials

Figure 15 Logical Analysis 5

c. The metropolitan transport branch as a system for meeting transport needs, with the general public as clients

C : general public

A : everyone providing infrastructure, operating, funding or managing transport

T : transport needs unmet → transport needs met

W : transport needs of public should be met

O : local government

E : lack of involvement of public

Root Definition

A system for meeting the transportation needs of the general public involving everyone providing infrastructure, operating, funding or managing transport. The system operates under a local government mandate, with the intention of meeting transport needs, in an environment of a lack of public involvement

Model	Exist or not?	How is it done?	How is it judged?	Comments
1. Transport needs identified by officials	Yes	Models & surveys	Not	Frameworks developed by officials
2. Solutions developed	Yes	Internally	Evaluation frameworks.	
3. Solutions presented to councillors	Yes	Meetings	Not	
4. Decision made	Yes	Ditto	By electorate	
5. Needs met	Not known	Not	Not	
6. Needs monitored	Not	Ditto	Ditto	
7. Performance measures identified	Not	Ditto	Ditto	
8. Control action taken	No	N/A	N/A.	

Efficacy : Addresses some needs

Efficiency : Not known if it addresses majority/most important needs

Effectiveness: Not known if it meets intent.

Figure 16 Logical Analysis 6

8.3 Cultural Analysis One: Analysis of the intervention

The logic-based analysis described above is supplemented by the cultural enquiry, which comprises three analyses. The first is the analysis of the intervention. In SSM the 'intervener' in the problem (in this case, the author) is required to identify issues which may impact on his or her description of the situation, thus accepting from the outset that *no-one* can be seen as a neutral bystander. In accordance with the method, an overview of the author's position is given below, under the three headings suggested by Checkland.

Client/ Problem solver Roles

Unlike many systems analyses, where the *client* would be the person having ownership over the investigation, the key client in this case is the academic world. This thesis *may* provide a useful input for those involved in urban transport decision-making in Cape Town, but the primary aim is the furthering of academic knowledge. The 'problem-solver' (the author) may be considered to be too removed from the urban transport problem. A possible advantage is that distance from a problem can provide a fresh perspective. A danger is that the author may have insufficient knowledge of the problem. This danger has been addressed, as far as possible, through the intensive interviewing of key actors in the problem, and the use of extensive quantitative surveys.

Social System

The social system (the norms of behaviour expected by the 'client' and the 'problem solver', and the values by which performance can be deemed as good or bad) are not explicit in the thesis-writing situation. However, certain implicit social norms have guided the investigation:

- An academic investigation is 'expected' to develop new knowledge, hence the investigation has not focused on the best way to solve the urban transport problem in Cape Town, but rather to identify new thinking on the issue of urban transport decision-making.
- This thesis has been prepared in the context of an engineering degree programme, by a qualified engineer, hence, although some social science approaches have been used to gather data, the tendency to slip into an engineering 'mind-set' may have prevailed. This has resulted in a focus on producing clear cut conclusions in the time-frame set, perhaps at the expense of an even deeper understanding of the problem.
- As a member of staff at the University, the 'problem-solver' was expected to establish and retain friendly relations with the professionals in the field. Hence, there may have been a tendency to avoid some controversial questions in the interviews, in order to retain relations.

Disposition of Power

Clearly, since the academic examiners have the authority to pass or fail this thesis, they are in the ultimate position of power over the outcome of the thesis. Others, more closely involved in the urban transport problem, have not wielded an obvious power over the thesis. The employment position of the author has enabled access to meetings and information, which may have been more difficult for another student. Furthermore, the experience of the author, in the transport planning field, enabled the interviews to take place in an atmosphere of reasonable equity.

8.4 Cultural Analysis Two: Social system analysis

The social system model of SSM uses the notion of interconnected role-players, with certain norms (expected behaviours) and values (behaviour which may be considered good or bad). The role-players examined in the analysis are those who have a social position which is *recognised as being significant* by the people in the problem situation. An example of the application of analysis is given in Figure 17.

8.5 Cultural Analysis Three: Political system analysis

According to Checkland, analysis three “accepts that any human situation will have a political dimension and needs to explore it” (Checkland, 1990) . Politics in this case is defined as ‘a process by which differing interests reach accommodation’ where the accommodation of interests relies on the power of the individuals involved. Analysis three specifically examines the *commodities* through which power is held in a situation. Commodities of power could be intellectual authority, charisma, reputation or access to information. An example of the application of analysis three is given in Figure 18.

ANALYSIS TWO	Analysis of System 1
<p>What roles are significant? (Role = social position recognised by actors in problem situation)</p> <p>What are the expected behaviours (norms) of the roles?</p> <p>What are the values of the role-holders? (Value = behaviour considered good or bad)</p>	<ol style="list-style-type: none"> 1. Provincial minister & officials 2. Other government officials 3. Public <ol style="list-style-type: none"> 1. & 2. To control the situation 3. To be generally apathetic about transport <ol style="list-style-type: none"> 1. & 2. Good: delegation of authority Bad: retention of control 3. Good: get involved Bad: don't get involved
<p>Key questions in Analysis Two</p>	<p>Illustrative example</p>

Figure 17 Analysis Two: Social system analysis example

ANALYSIS THREE	Analysis of System 1
<p>What 'commodities' of power are in place? ('Commodities' = authority, reputation...)</p> <p>How are the commodities obtained?</p> <p>How are the commodities used?</p> <p>How are the commodities preserved and protected?</p> <p>How are the commodities passed on?</p> <p>How are the commodities relinquished?</p>	<p>For officials: local knowledge For councillors: electoral mandate</p> <p>Education Election To retain power over decision-making To insist on power Not building capacity, not translating "I understand the people". Retain distance</p> <p>To colleagues, through experience Elections</p> <p>On decision of officials Stepping out of politics, losing election</p>
<p>Key questions in Analysis Three</p>	<p>Illustrative example</p>

Figure 18 Analysis Three: Political system analysis example

8.6 Discussion

It can be seen that systems 1 and 4; and 2 and 5 are very similar, and at times it was confusing to try and do all these analyses. At one stage, the 1 and 2 analyses were deleted since they were believed to be the same as 4 and 5. Later the realisation came that since councillors were always seen as clients in the decision-making process, it was very difficult to view the *officials* as clients. Hence the partiality of the author, and the dangers of doing SSM as a lone exercise, were highlighted. Pursuing all six systems was finally worthwhile, leading to fresh perspectives on the problem, but doing six analyses was also time consuming and tedious at times.

Of all analyses the cultural analysis three was found to be most useful, exposing possible reasons for some of the problems identified in the interviews. The insights from the logical analysis were often about similar issues to those gained on the interview analysis, but the insights gained were deeper and more specific. This judgement about the usefulness of the SSM methodology is probably due to the strengths and weaknesses of this particular application, rather than some inherent problem with the methodology itself. (Checkland 1972, p114):

9. From Insights to Action Plan

9.1 Introduction

This thesis has used the Soft Systems Methodology as a tool for analysing a complex decision-making process. The final stage of the process is to produce an action plan, checked to ensure that it has systemic desirability and cultural feasibility. Insights from this work are discussed in section 9.2. The action plan derived as a result of these insights is given in the following section and previous international experience in transport decision-making change, which may be relevant to this action plan, are discussed at the end of this chapter.

9.2 Some Possibilities for Improving Transport Decision-making in Cape Town

A series of insights was derived from the previous work and these are listed and discussed below in Table 9.1. They are discussed under four headings:

- Moving Towards Effective Delivery – and key blocks to that
- The Politicians as Partners – with officials and public in decision -making and delivery
- Moving Ahead with Officials – into new areas of work
- The Public as Partners – in motivating for change

Many of the interviewees identified that, before any improvements can be made to transport there are two key precursors, the resolution of the funding crisis, and the finalisation on institutional arrangements for transport. These are interdependent. Nevertheless, as Table 9.1 indicates there is still room for improvement in many arenas and these are discussed below.

Moving Towards Effective Delivery

In the SSM analysis the relationship between funding, power and effective delivery was considered. At present the Metropolitan level decision-makers feel largely powerless due to the lack of control over funding. It may be that the delegation of powers from National and Provincial government, and the associated funding is being hampered because of others wishing to retain power. The indecision over the institutional arrangements seems to have led to a decision-vacuum and there appears to be a reticence to commit time to new developments until this is resolved. Nevertheless it also seems obvious that, unless the priorities of government change, then transport funding will be a problem in future. Hence, there is a need for new creativity on the part of local decision-makers in order to generate new sources of funding. Clearly this is more of a management than an engineering task, and must be developed in partnership with politicians, operators and public.

At present there has been a plethora of policy document and institutional re-organisation. The key now is to 'operationalise' these into implementable schemes. One meaningful way is to ensure that schemes are monitored on an on-going basis against performance indicators, and that adequate transport data is collected.

The Politicians as Partners

Most of the politicians, for many reasons, believe themselves to be at some distance from the 'real' transport decision-making. Certainly many politicians found the arrangements at the time of the survey in some way lacking. Either the committee structure (which tended to be more acceptable to the white or older members and less acceptable to the black or younger members) or the agendas (which were widely condemned for being too long) or the technical jargon used in presentations and written information were criticised. There were also pockets of lack of trust between officials and politicians, with the politicians believing that officials wished to hang on to decision-making power, and not to let the politicians become too involved. There was lack of consensus regarding *who* should yield most power over the decision-making process.

There was also a sense of apathy amongst some politicians. Possibly they see little to be gained, in terms of votes, from a strong involvement in transport. Many politicians did not see the real need for long-term thinking and few were aware of the MSDF at the time of the fieldwork. The unclear link in the public's mind between transport developments and politics may also be a reason for politicians' reluctance to become too involved.

On the positive side a few politicians were very keen to get more involved, and suggested improvements to the committee structure, to encourage more workshopping, brainstorming and increase in creative output. Surprisingly, political rivalries appeared to play a very minor part in the transport decision-making arena (perhaps because transport has such a low profile anyway?). There was broad political consensus on the need for an improvement in the public transport system, but also a strong belief in the notion (greatly questioned in the literature), that 'road building will lead to economic growth'.

The need for 'capacity building' of members was widely acknowledged, by members and officials alike (but more frequently by officials). One councillor believed that he could not contribute meaningfully until he is better educated in transport matters. Clearly, officials have a role in creating a non-threatening environment, where all members of the committee believe that their contribution is valuable, and also in facilitating education of politicians. Without this the decision-making may be

severely distorted, favouring those who already have knowledge and information (generally the historically privileged).

Moving Ahead with Officials

The capacity building will need to be an ongoing task for the officials, since with each election new councillors will come into the decision-making arena, who will require information and development. Previously officials were not required to develop such relationships with politicians, and so there are new skills required from officials. As one councillor stated, 'officials need to be educated in the ways of a democracy'. The immensity of the transition for officials should not be underestimated. Officials have moved from a position of considerable power, where politicians were merely 'rubber-stamping', to a role as 'public servant'. In addition, many other changes have taken place. Regarding information, there has been a shift from an environment of withholding information unless there was a very good reason to disclose it, to an environment of 'transparency' and the free availability of information. Certainly most officials have embraced the new ways, but maybe some are still stuck in old habits.

Many officials voiced some level of frustration. There were many reasons given for this – lack of funding, institutional change, lack of councillor capacity, councillor apathy. Some seemed to struggle with the notion of working in a political environment, where politicians have the final say over decisions, and with the accompanying idea of being a public servant to the politicians. Many were also grappling with changes in the nature of their jobs, from an infrastructure engineering role to a public transport facilitation role, and it was apparent that both the engineering and the planning training had not enabled this transition. Further, although there was wide support for public transport, there was no acknowledgement of the fact that most of the decision-making group were infrequent users of the public transport systems.

Rivalry between planners and engineers was muted, but some clear differences were highlighted. In particular, planners seem to have less faith in economic evaluation than engineers (whilst politicians are happier with the technique than both professional groups!!)

The MTAB was seen as something of an anachronism, replaced to an extent by the new committee on Transportation and Traffic of the CMC. Nevertheless there was widespread support for a body such as MTAB, with mixed representation from industry, professions and politicians.

The Public as Partners

The public were seen to be at some distance from the transport work, partly due to the practical difficulties of involving them, partly due to a perceived apathy amongst them. It may be that the perceived apathy is reflective of an inappropriate public participation policy. Alternatively, the public may be so inured to a poor public transport system that they are not motivated to be involved. Another reason may be that some groups are 'workshop-weary' – a disease of the new South Africa. Unfortunately this lack of public involvement means that there is no adequate watchdog over the work of the transport decision-makers. The future may be different. As transport conditions get worse, and the public develop their group voice further, then the transport debate is likely to become more heated.

Insight
Moving Towards Effective Delivery
Ensure that the issue of funding is addressed
Do all that is possible to clarify the institutional arrangements, and the power over finances.
Develop a culture of action, rather than planning, through: education and training with the use of more international case studies on successful urban transport and the checking by management to overcome blocks in the system to implementation
Encourage the implementation of plans by a continuing role for operators on the committees
Improve the effectiveness of transport investments through an ongoing programme of before and after studies.
Overcome suspicion and lack of co-operation between planners and developers by a series of group meetings to discuss transport strategy for the new millennium. An outcome of this may be possibilities for private-public partnerships
Ensure that the new legislation and policies are effective through a series of information sessions with all stakeholders.
Ensure that the new transport investments are linked to new policy through evaluation using frameworks, and key-performance indicators.
Ensure that the transport debate is intelligent and well-informed via an ongoing, and well publicised programme of data collection at strategic points

Table 9.1 Insights: Some Suggestions for Improving Transport Provision

The Politicians as Partners Moving Ahead
Question the decision-makers on their preferred format for presentation of information. Consider reducing the size of agendas and making more use of presentations
Allow politicians to provide feedback to officials on the clarity of presentation of technical information.
Improve communication between all parties by clear definition of terms in use, eg vision.
Encourage more meaningful debate, and hence an <i>ownership</i> of the problems by politicians
Instigate a process of basic transport education and information for all new politicians entering the decision-making arena to allow more meaningful contribution and to stimulate interest amongst the politicians
Generate the interest in transport issues through contact visits (possibly overseas) involving both transport officials and politicians.
Generate the interest and support of the interested politicians by involving them from early stages of projects, not only at the decision-making stage.
Ensure that the transport investment programme (and hence those involved in it) is well supported by politicians through a rigorous presentation of the facts regarding investment choices
Encourage a common understanding of transport problems by ensuring that politicians are well-informed about new developments in transport thinking. (Eg the move away from road-dominance, and questions over the link between transport investment and economic development through an ongoing programme of capacity enhancement).
Moving Ahead with Officials
Reduce cynicism about the process by ensuring that all committees have a clear, distinct and useful role, and that there is no overlap of duties and powers
Improve the productivity of councillor – official meetings by agreeing clearly what the purpose of each meeting is: to inform; to lobby for change; to obtain a decision; to get advice on a project/process; to stimulate ideas.
Clearly inform officials of their new role in the decision-making process, and how it differs from the previous arrangements.
Re-train officials in presentation techniques, given their new client body
Re-motivate officials by allowing them to raise their concerns about the current arrangements
Encourage closer co-operation between engineers and planners, possibly through a sharing of ideas regarding their similarities, and frank discussion on the differences
Further develop the capacity of officials, on a technical level, especially in public transport management and planning. This may be achieved through secondment of public sector staff to operators
Market the changes in the transport system to the public, in order to address poor perceptions of the system
The Public as Partners Moving Ahead
Mobilise energies of the public through focus groups on transport, with the purpose of encouraging politicians to see the benefits (in votes) of an enhanced involvement in transport
Look more closely at the issue of public participation in transport decision-making. How can it be made more effective?
Improve the dialogue with the general public on transport issues, in order to public generate interest and so motivate politicians in the area of transport. Possible improve dialogue through a well advertised hotline.

Table 9.1 Insights: Some Suggestions for Improving Transport Provision

9.3 From Insights to Action Plan

Whilst Table 9.1 is a useful summary of the lessons from this work, it is essentially only a shopping list of possibilities, and it does not give guidance on the most valuable 'levers' for instituting change. At the beginning of this thesis, current transport planning methods were criticised for having failed to bring about change:

"Current approaches to transportation planning have yielded, at best, inconsistent results.....Planning is a critical element in the development and implementation of sound transport projects, yet existing practices have resulted in numerous problems and in, some cases, outright disasters." (Goetz and Szyliowicz, 1997)

What, then, from this shopping list of suggestions could yield change? Two further methods from the field of systems thinking were utilised in order to answer this question. Firstly, the items from Table 9.1 were taken and grouped thematically. Of each group two questions were asked:

- Does this issue impact on other issues?
- Which of the other issues impact on this?

In this way the 'drivers' of the system and the 'symptoms', or possible outcomes, of the system were identified. According to this analysis the building of trust and political ownership of the problem, are key pre-requisites for the development of Cape Town transport. Levers which could lead to this ownership are items which either create renewed political interest in the subject, or which overcome lack of trust and build better working relationships with the officials. The key levers, which form the priority action plan, are summarised in Table 9.2.

Action Suggested.....	...in order to....	...with the intention of...
<ul style="list-style-type: none"> ❑ Clearly agree the purpose of each meeting (to inform, to lobby for change, to obtain a decision, to get advice on a project/process, to stimulate ideas) ❑ Question politicians on their preferred format for the presentation of information ❑ Consider reducing the size of agendas, and making more use of good presentations ❑ Re-train the officials in good presentation technique, given their new client 	Improve the working relationship between all officials and politicians	Building trust
<ul style="list-style-type: none"> ❑ Share ideas regarding professional similarities, and frankly discuss professional differences 	Improve the working relationship between professionals	
<ul style="list-style-type: none"> ❑ Clearly define technical terms in use, eg vision. 	Improve clarity of communication between all parties	
<ul style="list-style-type: none"> ❑ Ensure that all committees have a clear, distinct role ❑ Allow officials to raise their concerns about latest developments 	Reduce cynicism, re-motivate the involved parties	Stimulating enthusiasm for delivery
<ul style="list-style-type: none"> ❑ Encourage personal development and upgrading of transport skills, especially in new areas 	Build confidence in officials	
<ul style="list-style-type: none"> ❑ Instigate a process of basic transport education in relevant areas for politicians 	Building ownership of the issues in politicians	
<ul style="list-style-type: none"> ❑ Develop education and training, promote knowledge, on topics of relevance 	Ensure the debate is well-informed	Reaching a <i>good</i> decision

Table 9.2 Priority Action Plan for Development of Cape Town Transport

In order to be feasible, Checkland argues that the action plan items identified must be both *systematically* feasible, and *culturally* feasible. All of the items identified here are systematically feasible, that is, they are logically possible. The issue of cultural feasibility is a matter of judgement, based in part on the output of the cultural analyses. It seems from the work undertaken so far that the lack of motivation may be one aspect of the culture which makes the action plan culturally infeasible. There has also been a history of defensiveness on the part of the officials which may make any change very difficult to start. Furthermore, the Action Plan requires 'capacity-building' of the councillors, but if the officials were to instigate this they could lose a key *commodity* of their own power – knowledge. Where there is lack of trust between officials and councillors then the transference of knowledge is difficult, since it requires officials to voluntarily step down from their position of power.

On the more positive side, there are plans for a new organisation of transport. A Passenger Transport Authority, or similar, has been proposed and this may generate a new cultural beginning and new possibilities in the organisation.

10. Urban Transport Decision-making: Case Studies

10.1 Introduction

A comprehensive review of case studies of urban transport decision-making is somewhat of a contradiction, since the literature yields very little which focuses on the decision-making aspect. Furthermore, it is clear from the work done using SSM in Cape Town, that a description of decision-making practice requires in depth investigation. Nevertheless, there are papers which describe transport planning methods and although they tend to focus on the technical issues of modelling and evaluation, some also provide information about the decision-making context, either implicitly or explicitly. This section describes a number of the most useful case-studies in a summary form.

10.2 Cairo, Egypt

Gakenheimer (1984) described attempts by a USAID funded group to move towards a 'project programming' approach to urban transportation decision-making in Cairo. In so doing, he exposed the state of decision-making around transport in Cairo at that time. The main features were of:

- multiple participation by the many agencies with an interest;
- development and implementation of projects by agencies, with the minimum of guidance from the Ministry of Transport;
- no single arbitrator, and lack of a hierarchical decision system; and
- lack of agreement over the best decision-making approach to adopt.

10.3 Birmingham, UK

In the UK, the traditional approach to decision-making has been in the context of Structure Plans, describing in general terms plans for the urban area, and annual Transport Policy and Programmes (TPP), a submission to government outlining actual transport schemes requiring funding. In Birmingham, there was an acknowledged lack of clear corporate direction, and major proposed changes to the transport system (a new LRT scheme, and proposals for development) precipitated a new look at the decision-making system.

It was decided that a transport strategy would be put in place, seen as only one aspect of a broader 'urban policy' stance, encompassing social, environmental, and economic concerns, and taking a view well beyond the 30 year time horizon. It was also decided to involve all political and interest groups. To help the process, the political record over the previous 5-10 years was examined, and certain strong themes of vision emerged.

To facilitate the process consultants were appointed to examine the various options open, and the likely outcome of a 'do-nothing' scenario. Rather than the development of a list of *schemes*, which tended to be the case in the past, the output was a list of *objectives*, a strategic 'blueprint' which could be interpreted into a list of 'tactical' schemes.

The authors of this piece contrasted their 'integrated and strategic' approach with the 'technocratic' approaches of the 1960's and 1970's, and also the 'naiveté' of leaving planning to the 'market'. The key features of the new approach were described as:

- separating the strategic from the tactical, by looking sufficiently far ahead to be 'out of range' of even the most ambitious scheme of programmes;
- arriving at a view about the long run before turning to medium and shorter term issues;
- concentrating on the *processes* for generating and assessing short term proposals, rather than on the *proposals* themselves.

The key difficulties are described as:

- the lack of any clear models for the long-range transport/land-use effects;
- the political difficulties in bringing about major changes to urban fabric;
- the deterministic habits of planners and politicians; and
- the barriers between planners and engineers which mitigate against holism. (Wenban-Smith et al, 1990)

10.4 Melbourne, Australia

In 1990, in response to a self-appraisal of past approaches, and increasing environmental concerns, the Roads Authority of Melbourne initiated a study 'to provide a strategic framework to address the demand for and the management of Melbourne's traffic to the year 2000 and beyond.' The study developed a philosophy of 'community needs-based planning' which had five tenets:

- planning needs to be participatory since implementation will rely on the support of many groups, each needing to have ownership and commitment;
- planning needs to be both in-depth and with breadth;
- planning needs to focus on ends and means simultaneously, since strategies will generate impacts, and these must be understood;
- planning needs to be values based, which are more stable over time, and more likely to be accepted over time, than strategies; and
- planning needs to be a continuous process.

The team identified that there were two stages to the study, firstly to increase awareness, secondly to increase credibility (especially since, in this case, the initiating agency was seen as a road construction agency); and thirdly to discuss issues, based on a series of discussion sheets prepared beforehand. Using an approach described as 'similar to that used in ...recent UK studies' (and described above under Birmingham, UK), the agency then decided to develop a vision describing the sort of city the residents would like to have.

A systematically structured 'search conference' was used to bring together stakeholders and to generate a set of shared values. Unlike the Birmingham and other UK work, where policy and service providers developed the vision, the group at the search conference included large representations of other groups. The outcomes of the search conference, and other submissions were checked against market research, and then a vision reflecting the values was prepared, under four headings: our way of life, our city, our environment, our economy. Further, more detailed, ideas were developed by the search conference on principles (how transport agencies should go about their work), strategies and actions. Later, detailed technical analysis was undertaken of all of the proposed strategies and actions. (Anson and Willis, 1993)

10.5 Portland, US

Portland has been a discussed and debated city, in part thanks to a plan called LUTRAQ (the Land Use, Transportation and Air Quality alternative). This plan moves away from infrastructure solutions to Portland's problems, and instead suggests that moderate land-use densities, pedestrian focused neighbourhoods and regional public transport routes are a preferable alternative.

Portland's decision-making is influenced by national regulations seeking improvements in air quality. The state laws also support this through their transportation system plans, which must demonstrate reductions in vehicle miles travelled. Further, the State laws reinforce the thrust towards increasing densities. The recently developed Metropolitan growth plan focuses on growth management, rather than growth satisfaction. The decision-making is influenced by the following:

- National, federal and metropolitan Policy. These policies focus on managing demand for transport, and improving air quality and are supportive of one another.
- Supportive environment for planning. Portland is considered to have a strong tradition of progressive planning. There appears to be a high degree of consensus about the preferable way forward.
- Strong citizen involvement. The environmental lobby in Portland are vocal. Public involvement is considered to be critical to the decision-making process.

- Public transport operators supportive of plan. The public transport operators of Portland have enthusiastically embraced the new direction and specifically mentions land-use changes in its mission statement.
- Leadership and vision. A succession of leaders interested in promoting planning legislation have assisted in the development of Portland's current position. (Minter, 1997)

10.6 Curitiba, Brasil

Curitiba, Brasil, has been the fastest growing city in Brasil, and yet is widely mooted as a 'sustainable' city, in part thanks to its efficient public transport system, attracting 70% ridership, and a road system relatively free from congestion. Curitiba has developed into an important role model for Cape Town. A delegation of planners and engineers visited the city in the mid 1990s and since that time the city has informed planning, and particularly the development of Cape Town's Metropolitan Spatial Development Framework. (See Chapter 6.2 for further details).

The institutional arrangements in Curitiba are characterised by the following features:

- A centralised municipal government with a strong planning body. The authority given to the 'Curitiba Institute of Research and Urban Planning (IPPUC), as well as the consistency and enthusiastic nature of the planning team have clearly been an important factor in the successful implementation of the Curitiba Master Plan;
- Leadership and vision. Jaime Lerner, the 'visionary' director of the IPPUC from 1965, and Mayor from 1971 - 1993 is credited with concretising the vision developed by IPPUC and formulated in the Curitiba Master Plan;
- Authority and structure of public transport managers. The authority managing Curitiba's public transport system (URBS) is somewhat unusual. In addition to regulating the private companies operating services in Curitiba URBS also has influence over land-use decisions taken in the city, and may stand in the way of developments seen to be supporting car-use. URBS generates income through the collection of rent at bus terminals. This income, plus fare revenue mean that URBS is able to operate without public subsidy.
- Efficient bureaucracy. The private sector are confident in the ability of the public sector to offer efficient decision-making and so, despite a strong set of regulations, the private sector continue to invest.
- Supportive civil society. It appears that the Curitibaans are either supportive towards the authorities or, for some reason, without a voice to disagree. This has helped the leaders to implement their plans without dissension. (Minter, 1997)

10.7 Ithaca, US

Ithaca is one of the principal cities in upstate New York. In 1992 it was designated as an area requiring a Metropolitan Planning Organisation (MPO), and a new transport plan. A community-based planning process was adopted to accommodate the needs of the community. This was achieved through use of seven task teams and public meetings. The task teams were based on functional areas and comprised citizen members, co-ordinated by the MPO. The adopted approach was described as the 'strategic comprehensive' approach, combining the 'rational comprehensive' (identifying boundless numbers of issues, developing goals relating to these, and making decisions based on data) and the 'strategic' approaches (implementation orientated, focusing on key issues and the environment of implementation). The 'strategic comprehensive' approach attempted to combine both of these by:

- ❑ establishing a conceptual framework for the development of the plan;
- ❑ identifying major transportation issues;
- ❑ developing and articulating a community vision;
- ❑ refining and prioritising the issues;
- ❑ developing strategies that address the highest priorities;
- ❑ examining strategies to identify their implementation potential; and
- ❑ allowing time for adoption, implementation and feedback. (Boyd, 1995)

10.1 Conclusions from the Case-study Literature

Although the above case studies are different in many aspects, some similar themes do appear:

- ❑ Strategic approach used (objectives and issues not schemes);
- ❑ vision and leadership in place, or being developed;
- ❑ consensus between politicians and officials of the need to get things done;
- ❑ a supportive legislative framework;
- ❑ substantial power resting with the transport authorities at a local level; and
- ❑ involvement of the broader community.

10.2 Cape Town Action Plan in the Context of International Experience

The major difference between the case studies discussed and the Cape Town situation is the issue of transition. In addition to tackling major transportation problems, all Metropolitan areas of South Africa have been in a period of immense upheaval. It would appear that Cape Town has a long way to go before it could instigate processes similar to the ones described in the case studies. The preparation of a strategic vision was mentioned as an important issue in many of the case studies, and although one has been developed for Cape Town (the Metropolitan Spatial Development

Framework), it was developed at a time of rivalry in local government, and so it has only recently developed broad support, and many of the politicians interviewed for this thesis were unaware of its existence. The latest transport plan 'Moving Ahead' defines strategic goals, but these were developed before consultation with politicians, and so although the politicians may 'buy in' now, it is unlikely to have the same weight as the Melbourne and Birmingham initiatives where politicians were very much involved in the formulation and development of the strategy.

Vision and leadership, by the interviewees' own admission, are lacking in Cape Town. This is partly due to a lack of suitable figureheads, partly due (again) to the local government transition, and to the development of new skills in some politicians, which has drained them of personal resources. Also, although the local authority have gone to some lengths to involve the local community, especially of late (1998), the turn-out to meetings has generally been small, and the interest in the plan relatively low-key. This may be due to 'change-fatigue', mentioned earlier. However, it may also be due to problems with the process itself. It would be a useful exercise to compare the community involvement processes adopted by the case-study cities described, with that undertaken in Cape Town.

Finally, an issue which was raised many times during the research was that of information. Politicians in particular were frustrated at the quality of this. Boulding, quoted in Meyer and Miller has a firm perspective on this:

"The products of planning should be designed to increase the chance of making better decisions.....the result of planning is some form of communication with decision-makers" (Boulding, 1974)

The systems analysis identified clear accessible information, and better communication more generally, as key levers for developing trust between officials and politicians.

"I think part of the problem is that we've only recently embarked on the road of the so-called 'New South Africa' and therefore thinking new for South Africa." (Cape Town Councillor, 1997)

11. Discussion of Methodology

11.1 Overall Methodology

This thesis was based on the premise that transport planning is *failing* to deliver a transport system which fully meets the needs of urban dwellers. This premise has not been tested during the research. The hypothesis of the thesis is that *one reason for the lack of transport delivery has been insufficient attention paid by transport planning researchers, and by the transport planning profession, to the decision-making process*. At the beginning of the work it was discovered that there was a need to define and explore transport decision-making before suggesting improvements to it. Accordingly, decision-making has been investigated, in this instance using SSM and case studies, and an action plan has been developed. Unfortunately it has not been possible to test whether the hypothesis is true or false. Testing this would require implementing the action plan and carefully monitoring the outcomes. Such work could possibly be the subject of a Doctoral thesis.

11.2 The Methodology and Objectives

The thesis objectives are repeated below:

- describe the present urban transport decision-making processes in Cape Town;
- illustrate that a detailed and rigorous investigation of the decision-making process can yield insights, and an action plan, which could assist in improvements to the execution of the transport planning process;
- illustrate how social science methods (interviews and surveys) are a means of undertaking this investigation;
- illustrate that Checkland's Soft Systems Methodology is an alternative means of undertaking this investigation;
- illustrate that the examination of case studies is a further means for undertaking this investigation.

Clearly the methodology employed has yielded a description, insights and an action plan. Whilst the use of any social enquiry may have achieved this, the soft systems approach time and time again lead to more detailed and more specific insights than, say, the interview or questionnaire analysis alone. In particular, the cultural analysis of power lead to some interesting issues around where the power currently is, and whether this is leading to a decision-vacuum.

The development of the 'rich picture' facilitated an in-depth learning process about the history and status of transport policy, not only in Cape Town but in South African as a whole. It was problematic to know how to conclude such an investigation, and to what depth such work should probe.

In practice SSM is primarily intended for use as part of group decision-making, and the approach used in this thesis certainly did have some disadvantages. It was particularly difficult to retain clarity of thought when producing the root definitions, which may have been assisted by a group decision-making approach. Also, it was tricky to move away from the firmly believed position which was in place at the beginning of the thesis - that politicians should become more involved in transport decision-making in South Africa.

The questionnaire analysis was not as useful as had been expected. The dichotomy between officials and politicians and between planners and engineers did not feature as strongly as had been anticipated. Also, meaningful interpretation of the results was hampered by small sample sizes and by the fact that engineers dominated the official group.

The individuals interviewed for this thesis were all members of the Metropolitan Transport Advisory Board during April 1997. This board was chosen for detailed review since at that time it appeared to be central to the decision-making process in Cape Town. Since then, partly due to local government re-organisation, the situation has changed and the power appears to be shifting, with a new committee becoming more powerful. Nevertheless the MTAB membership are still largely involved in transport decision-making, and some of the members have been involved for a period. In retrospect, it would have been useful to delay the second set of interviews in order to include the members of the Cape Metropolitan Council's Transportation and Traffic Committee, which was formed mid-way through the research period, as they could have given further insights. Nevertheless, since nineteen interviews were finally taken, this formed a substantial database of views and comments. One major shortcoming with the interview approach concerned language. It was difficult to probe nuances and delicate issues with interviewee's whose first language was not English, and inevitably there was a certain suspicion regarding the motives of this work.

The last part of the work, the development of the action plan from the insight list was particularly valuable, in particular for separating the levers influencing the process from the symptoms of the process.

11.3 Usefulness of Case Studies

The case studies performed two very important functions in this thesis. Firstly they informed the interviews and questionnaire on issues of interest. Secondly they provided an interesting contrast to the approaches taken in Cape Town. However, in general the review of case studies were not as useful as had been anticipated. Decision-making is probably too complex to report on satisfactorily in a journal paper. The description is by necessity only partial and the author is now convinced of the need to be fully immersed in the decision-making context in order to get the full 'rich picture'.

12. Concluding Remarks and Further Work

The insights and action plan summarise the recommendations from this research. It is interesting to note the following common issues with the other case studies examined:

- Political problem in bringing about change (Birmingham)
- Barriers between planners and engineers (Birmingham)
- Call for participatory planning (Melbourne, Ithaca and Portland)
- Recognition that planning is values-based (Melbourne) (This issue is not yet acknowledged in Cape Town, but differences in values may be causing some of the mistrust between politicians and officials)
- Need for leadership and vision (Portland and Curitiba)
- Generally there was a call for 'strategies' rather than 'schemes'.

The next step of this Cape Town work would most naturally be to implement the action plan. This would require considerable support from the more senior people involved in decision-making, but would prove a fascinating piece of action research. There may be some possibilities for implementing some of the ideas, since the transport authorities in Cape Town are still in a state of flux, and there may be moves towards a new transport authority. The role of politicians in that framework is unclear at present. In order to canvas views on further work, sections of this thesis will be disseminated in the form of papers, but also feedback will be given to those who were interviewed, or who helped in the work.

Major change to transport in the short term in Cape Town seems unlikely. Incrementalism, and small changes, appear to be the rule in transport. Nevertheless, it seems that Cape Town has significant potential for *some* change, if only a few of the action points listed above could be embraced.

Acknowledgements

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Appendix A. Questionnaire Form

Attitudes to Transport in Cape Town

This questionnaire is designed to explore the attitudes of politicians and officials in Cape Town, and in particular it asks for views on how transport-related decisions should be made. It is simple to fill out, and will take less than ten minutes of your time but will provide very valuable information, which will be used for research at the University of Cape Town.

Please follow the instructions below and return in the attached envelope, or fax to:

Lisa Kane, Department of Civil Engineering, UCT

Fax: 689 7471

Any questions? Please call Lisa Kane 650 2593 (office hours)

Background

I would describe myself as: a government official a councillor other (please state)

I would describe my job as: a town planner an engineer a transport planner other

Instructions

Please read the statements below and give your opinion (either strongly agree, agree, tend to agree, tend to disagree, disagree or strongly disagree) by ticking your answer in one of the boxes. Please answer all questions.

Strongly / Agree / Tend to / Tend to / Disagree / Strongly
agree agree disagree disagree

Attitudes on decision-making in transport

A problem needs to be quantified in order to be understood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Scientific analysis is the <i>worst</i> way of finding answers to problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Facts are the closest we can get to the truth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Decisions should <i>never</i> be made by those with vested interests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Officials have full understanding of politicians and the political processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Engineers and planners are the experts, and so they should have the largest say in transport decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Measuring economic efficiency is the best way of deciding whether a project should be built	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
An economically viable transport scheme will also improve quality of life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All transport schemes should be assessed on the same basis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

....continued overleaf

Appendix B. Interview guide for first stage interviews

Field Interview on Transport Decision-making in Cape Town

Notes to self: Use "" for quotes, '' for paraphrasing

Interviewee

Date

Time started and finished

Location

Initial Thoughts

The purpose of this research is to explore in detail how decisions are made about transport in Cape Town. This work is contributing to a Masters thesis at the University of Cape Town, and to international research on transport decision-making, which presently is poorly researched. If requested the research can be made available, and so it may be possible to improve mutual understanding between politicians and officials involved in MTAB decision-making.

The research is in three parts. Part one is an international desk-top study of all work in the area. Part two is a quantitative survey which questions attitudes to the present decision-making approach. Part three is a series of in-depth interviews, to give substance to the findings of the survey, and to explore some of the more difficult areas. For this part of the work, eight members of MTAB are being interviewed, 4 politicians and four officials. You are one of those interviews.

There are no right or wrong answers to this interview. I am looking for your views.

Background

To begin with I would just like some general background information.

So far, how much have you been involved in decisions about transport or land-use developments generally? And in Cape Town specifically?

On what sorts of committees? (Exco? Metro? Substructures? Sub-committees?)

In what roles have you been involved in transport decision-making? What sort of decisions have you been involved with? For how long have you been involved?

Members? Chairs?

For politicians: What is your political affiliation?

For officials: Where do you fit in the local government hierarchy?

Department?

Do you think you have been involved long enough in transport-related decision-making in Cape Town to be able to have formed views and make comments on how it is done?

If not, please answer wherever you can, and otherwise comment on your general experience.

The current decision-making system

I would like to explore your thoughts on how decisions about transport are currently made in Cape Town.

Do you have any comments on the way in which decisions are made at the moment in Cape Town? (I will prompt you on a number of issues which I would like to cover)

(Committees system?
Too formal/informal?
Number of people involved? Balance of people involved? Sort of people involved?
Too technical?)

Some say that decisions about policy matters and implementation matters should be made differently. (By different committees, and so by different people) What are your views on this?

How much involvement do you think that politicians should have with the decision-making, and how much should be left to the officials?

What do you think the involvement of officials and politicians should be with each of these areas (policy and implementation)?

Another subdivision could be between short term decisions and longer term decisions. Is this a useful distinction? What do you think of the role of officials and politicians in each case?

Do you think that officials/planners politicians are clear of their role in the decision-making process? What should their role be?

Information for Decision-making

Now thinking specifically about the information which is given out to assist the decision-making process, do you have any comments on it, from your involvements so far?

(Too much, little?
Technical level?
Visual, words?
Verbal presentations?
Should there be
recommendations
from advisory board?
Should
recommendations be
in the form of limited
options or many
options? Should the
recommendations give
preferences, or
advantages/disadvanta
ges of each option?))

Planning for the Future

How would you define 'long-term'?

Thinking now specifically about MTAB. Do you think MTAB should be involved in long term transport planning?

(If agreed the MTAB should be involved.) How do you think MTAB should be involved in long term planning?

What should it do?
What sort of activities
should its members
do?

(If disagreed) Do you believe there is a role for long term planning (ie planning for the long-term?) If so, how do you think this should be done? And by whom?

What do you think Exco's role should be in long term transport planning?

Are you aware of the work of the Moving Ahead Steering Committee? What do you think their role should be in long term transport planning?

What is important to help in long-term planning?

How important do you think land-use and transport modelling is in long-term planning?

How important do you think vision is to long-term planning?

How important is it to have a strong leader?

How important is it to have detailed information/forecasts?

A 'good' transport decision

In your view what makes a good transport decision?

Does it need to....
Satisfy voters/ward/
senior management?
Long term benefits of
Cape Town, country,
ward? Economically
beneficial?
Improve quality-of-
life ?
Employment?
Olympics?
Congestion?
Financially sound?

What do you consider to be the main forms of transport in Cape Town?

What do you consider to be the main problems facing transport in Cape Town today?

Knowledge

Do you think there is a need for educating politicians and officials about issues on transport. For politicians? How should the education be structured? For officials? How should the education be structured?

Any other comments on this topic?

"I feel that this interview was.....do you think this is a fair interpretation?"

My final thoughts

Own emotional
feelings
Interruptions
Appearance of
interviewee

Appendix C. Interview guide for second stage interviews

Field Interview on Transport Decision-making in Cape Town (Follow-up Questionnaire)

Notes to self: Previous Questions shown in bold, new questions in normal

Interviewee

Date

Time started and finished

Location

Initial Thoughts

The purpose of this research is to explore in detail how decisions are made about urban transport in Cape Town. This work is contributing to a Masters thesis at the University of Cape Town, and to international research on transport decision-making, which presently is poorly researched. If requested the research can be made available, and so it may be possible to improve mutual understanding between politicians and officials involved in decision-making.

The research is in three parts. Part one is an international desk-top study of all work in the area. Part two is a quantitative survey which questions attitudes to the present decision-making approach. Part three is a series of in-depth interviews, to give substance to the findings of the survey, and to explore some of the more difficult areas. For this part of the work, eight members of MTAB are being interviewed, 4 politicians and four officials. You are one of those interviews.

There are no right or wrong answers to this interview. I am looking for your views.

Background

To begin with I would just like some general background information.

So far, how much have you been involved in decisions about transport or land-use developments generally? And in Cape Town specifically?

On what sorts of committees? (Exco? Metro? Substructures? Sub-committees?)

For how long have you been involved?

Members? Chairs?

For politicians: What is your political affiliation?

For officials: Where do you fit in the local government hierarchy?

Department?

The current decision-making system

I would like to explore your thoughts on how decisions about transport are currently made in Cape Town.

Do you have any comments on the way in which decisions are made at the moment in Cape Town? (I will prompt you on a number of issues which I would like to cover)

(Committees system?
Too formal/informal?
Number of people involved? Balance of people involved? Sort of people involved? Too technical?)

In view, what have been the most significant changes in the decision-making process in recent times?

Do you think there has been a shift of power in recent times?

Do you think that officials/planners politicians are clear of their role in the decision-making process? What should their role be?

I would now like to explore your thoughts about decision-making more deeply

Who do you consider to be the main customers of the decision-making process?

Who do you consider to be the key players, or actors in the system as it operates today?

How would you describe the sorts of decisions which are made? (Do they focus on specific issues, or on budgets, on operations?)

Do you believe that people in decision-making share a common mindset? If so, what would you say it is?

Who do you believe holds the ultimate power of decision-making in transport?

Are there any issues outside the transport sector which are having significant impacts on urban transport decision-making? (Eg Crime, labour unrest?)

Information for Decision-making

Now thinking specifically about the information which is given out to assist the decision-making process, do you have any comments on it, from your involvement so far?

Planning for the Future

How would you define 'long-term'?

What is important to help in long-term planning?

How important do you think vision is to long-term planning?

What time-horizon do you think a vision should cover?

General views on transport

What do you consider to be the main problems facing transport in Cape Town today?

Any other comments on this topic?

"I feel that this interview was.....do you think this is a fair interpretation?"

My final thoughts

Own emotional
feelings
Interruptions
Appearance of
interviewee

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**Appendix D. Thematic analysis of Interviews – The
Current Decision-making Process and Possibilities for
Change**

Appendix D - The Current Decision-making Process and Possibilities for Change

Councillors

It has always just been for roads, never (transport) although it is called 'transport',. It's only really been for throughways.

If you dissect MTAB, if you see what you got to concentrate on is road, rail or air whatever the case maybe, or shipping what ever the case. Break it up in sub-committees and all you need is a handful of people with some sort of knowledge or people that are prepared to learn and can do the research and come back with that knowledge to input into that particular (issue) and from there you got your leader out of that who can then report back...

Talks, about talks, about talks, Nobody really want to get down to brass tacks and do the job.

Q: Basically the officials structure aren't using the energies of the politicians?

A: That is right yes.

I must say that being in the advisory aspect of this thing, I just wonder if we are serving any purpose at all? Because I don't think anybody takes any notices of what they do, at that advisory level. I think there is an intention apparently to close down the advisory committee and replace it with a more structured committee which maybe is a good thing.

... I personally just feel that by going every two months and you sit there for 2 to 3 hours, virtually to just get a little bit of a report back, you never really get into the meat of the subject where you can also be, sort of play a role, or play a part, in decision-making, on the way forward.

If you look at the list of people involved and if you get a handful of these people at a meeting, it is a lot. When we say handful of this, we say 15 or 16, and all they come is to sit and listen about the subjects, and topic matters. These people have obviously made themselves available to serve MTAB. Their strength and weaknesses should be analysed...they can then be separated and say "well I'd like you to go to that sub-committee or to that sub-committee", and we can be more meaningful.

From the numbers that represent the various councils, it seems to me that we have a very well balanced group of people together there.

I don't think there's much wrong with the balance (at MTAB) - it seems to be alright..... I think the *local* councils are a bit at a disadvantage because they, even more so than the metropolitan councillors, really have very little idea about what transportation planning is all about and they need the upgrading more than anybody.

I think there's a good mix of folk, there's a broad spectrum of stake holders and role players.

I will say that basically perhaps it (MTAB) is useful, so that you facilitate the flow of information both ways. Because it is good when the (bus and taxi) drivers actually know what the local authority wants. And also because the drivers are also part of the community, for councillors to know what *they* actually want.

Now, I must say that I feel free (to talk) and the people there are flexible. I must say, I feel free. I feel free in the meeting, yes, there is no problem and I participate in the meeting.

Well, as far as the committee system of the discussion at the level which I have been involved in (it), seems to be highly informal in fact that everybody makes a input.

They are quite formal (the meetings), I mean we meet officials just at meetings. Of course, there are those who make the environment more friendly, and more informal, to facilitate relations between officials and councillors. But of course, what is happening is that we are still undergoing restructuring so things are not yet settled.

....unless you have a committee system which is fairly formal, it degenerates into a slanging match. There's a very delicate balance in the relationship between officials and politicians and if either become too matey, the whole procedure actually degenerates and is not as effective....I personally wouldn't like to see it anymore informal because I don't think it would work....No, I don't think there's a need to change.

.... You know the alternative to several committees is to just have several full council meetings, we (would) never get any work done. *Because* there are some things that have delegated authority to the committees, they are passed, they're sorted out and off it goes.

Many of the reports that are placed before MTAB as I read at the moment, may well be unintelligible to many of the political appointees. Before those reports are actually framed, maybe the issues as intricate and complicated as would affect the ring-road for instance, need to be debated in a workshop with politicians and with professionals, rather than decisions been made largely in the profession arena.

....if you ask politicians to have a meaningful input then there needs to be a workshopping not just with MTAB, but with certainly all the major local authorities ...affected (by a scheme).

It's a social problem. It is a question of slowly turning these people round, that some fixed ideas are not the norm and need not be only one...because it takes a long time to change people perceptions.

Well, of course the over-riding thing that has been recently has been "the preparing for the Olympics" and the importance of various roads in relation to being able to cope with the Olympics and as I explain now, that is finished.

Once you start talking to the communities, then you are getting down to very parochial approaches and you need great skill to break through those parochial interests.

It is so easy to sit on the sideline, and say how things should be, maybe it is much more difficult if you are involved to get all those things through. Today, with the new South African attitude toward transparency and dialogue...well things are not going to get easier, they're getting to get more difficult.

I would say potentially it (the profile of power in decision-making) is changing...(there are more workshops around issues).

....and now I am talking politics, that we have more or less still a white government in the Western Cape. The biggest disadvantage is that we are still relying on expertise and on people trained in the old era, and I think change will come easier in the other provinces.

You know, whether you come from the Black or Coloured Area you don't have any knowledge of how the workings are of the council. At the moment, there is a tendency to form these exco-Committee, and they have a chairman and tendency is generally that the exco-committee must make all the decisions, and its still one of the relics of the old system and it is, in my mind totally wrong, because it leads to a lot of problems.....

Well, I can't say that I have seen any significant change in the way decisions are taken.

So decision making is a problem. Transport in itself is going to get attention, is going to be upgraded because the people living in this country will slowly realise that the car is outmoded and it has to go.

...they first have to speak to the people. They have to bring it (planning) to the people first. They have to have a meeting with the people first, and here you must take that peoples' view first before you can go further. You cannot do anything on your own. No matter what committee it is.

So yes, on physical planning I have a feeling ... that we must certainly densify, we must certainly start forming nodes of towns, cities and go higher and make them stronger

And I think it will start here, first of all, the start of it, you can already see with the bus running to the Waterfront and so on ... So, yes, I see a slow change in transport and I believe also that Metro Rail is doing its best now to give security at the Railway Stations.

Officials

I think historically it's (MTAB) been very important because most of the expenditure from the Urban Metropolitan Transport Fund was approved by MTAB so they act as a body to prioritise and to approve many of the projects, but I think one must understand that then it related mainly with road projects and perhaps some inter-change facilities but not really with rail facilities because that had its own decision making structures so it was of no fault of their own that they focus more on the road. Perhaps MTAB were involved lesser on policy making, although some policy documents they did push through.

...now, that we have a Metropolitan Government it is no longer necessary to have this sort of system (MTABs).

I think more recently we have come to realise that we should involve the operators (in meetings) because they are major role players and trying to draw up a transport plan without their input is going to be you know, catastrophic.

I haven't really been struck by the need to perhaps restructure MTAB but that could well be due to my own lack of involvement.

I think MTAB has been very objective. We've had some very healthy debates in MTAB and I think by and large the people have been metropolitan rather than territorial.

The committee system is tedious from an official's point of view because whatever you want to do must take at least a month and it's probably 3 committees that it goes through. The standing committee, executive committee and then full council. And one is often frustrated, if one needs an urgent decision and there aren't delegated authorities to take a decision...The formality of it...councillors seem to be quite comfortable in the system and the metropolitan council meetings are much, much more efficient than the city council meetings.

MTAB meetings have never been that strict. I think that the councillors and board members have appreciated the fact that you know if they have something more to say they *will* be recognised by the Chair. That seems to be carrying on with the new thing.

It is very difficult when you're in a formal committee when you're following formal meeting procedures in a political situation like that. It's so often difficult for you to really maybe say what you want to say and for you to brainstorm issues.

The Cape Metropolitan, well it used to be the Cape Town City Council, but they have always had plenty of expertise here, they were sort of fine, in many ways. Remember Cape Town has been the first to build freeways, and even in the fifties. It has been an International City ever since. So, I think that Cape Town, the decision-making here, has been good, well thought out, etc, etc. I have no complaints about Cape Town.

We keep the body (MTAB) going so that the people have the comfort zone. Those people they must move. I have mentioned here, we got to learn to change our thinking about rail, we must change our thinking about transport, and we must create the instruments, the vehicles, the mechanisms, the structures, that credibly support the goals which we are trying to achieve...

Well, look, we haven't done a hell of a lot in transport in the last 5 years but the thinking and the planning has all been on public transport. Mostly bus - there's been some rail planning but that's been done by the railway - sort of outside the metropolitan thinking. That's also a shortcoming in our planning - they've become more integrated with us and we'll get more and more so in the future. Most of the planning up until just a few years ago was road-based.

At the moment I think MTAB is pretty weak because of the changes that happened and it is not very formalised, I believe, and the new legislation don't adequately make provision for a MTAB, both national and provincial, but there is no reason why provincial legislation cannot resuscitate MTAB into a strong body that come alive again and play a major role. ...But I think MTAB at least provided one with a sort of broad based political representation, from the different Municipalities, which I think our CMC transport Committee lacks that. CMC as an overall body is supposed to be given that Metropolitan representation. The Transport Committee itself, is just a few people and they cannot, I think, adequately represent the Metropolitan area.

.....Well I would say (the decision-making is) fairly adhoc because the structures and the politics have not yet been sorted out adequately. Our Moving Ahead is not finished yet, and I think only once that is done and you know, one can probably start moving into a more coherent program of action... I mean there are these huge developments that seem to be in an enormous hurry to get off the ground. And we have all of a sudden have to react and maybe approve some rail project or freeway interchange and some money comes from the Province and it never has been on our plan and all of a sudden its there. So it's this need for job creation that fuels or spurs on the local authorities to get going and But so there is a lot of adhoc reactive (decision-making), we try our best, but I, mean, we are not always successful.

I remember, when we started talking to Durban in about the (early) 1990's you know the whole idea of public participation was completely foreign to them and they were scared of it, you know, they did not want to talk to everybody. And many people did not want to speak to them either. It was this whole thing about everybody being wary of talking to the government, supposedly illegitimate government and so on.

We have never had any direction in public transport. There has been no entity whatsoever, that can remotely assume having had any responsibility for public transport ...

**Appendix E. Thematic analysis of Interviews – Power
and Leadership**

Appendix E – Power and Leadership

Councillors

I don't discern any strength (in the decision-makers). The province is, at our level, the people who control the issues and they have been reduced and changed. The Metropolitan Council has taken over recently the real sort of road co-ordination aspect from the City Council. So, I would imagine that really that is very difficult for people to have developed power bases, because of the changing structures in which they are. Well, the politicians who get involved are, of course, all municipal politicians and most of them have been there for generations, so their ability to know what is going on is quite high. I think they constitute a pressure group which has got a, shall we say, a 'background'. It is not a question of new politicians in the main, new politicians coming in, who have completely different views.

I mean if the officials basically are not having what I call "new thinking" and the Council (is) not having "new thinking" I mean that Committee is condemned basically because there is no initiative, and no desire to understand first what the problem is, so they continue in the same old way

The officials and politicians take good decisions, yes "we must do that" then, because the officials essentially they are the officials from the old order, and unfortunately you can oppose them for some time, we cannot chase them away (the decision does not get implemented). But they (need to) understand that we are dealing now with whole communities, not just dealing with a section of communities, dealing with people from diverse cultural backgrounds who need sensitivity.

I think now at this moment a great deal of decision making still lies with the officials.

Many of our councillors come from a background where they haven't had the same opportunities, as say for instance the whites, so they are not always in a position to make a well informed decision or even make that kind of, or shall we say, that well developed input as far as policy is concerned. Another person may argue, but then it depends on the process which you implement to allow the councillors to understand what things are all about so that they are able to make a meaningful input. Now whether it happens or not, the point is, I believe and I can see it, and there are many examples of this, where officials had gone and made decisions.... I think people have learnt over the years, and they've learnt it from people older than themselves, that you take charge and you're in charge, and the others must listen and do as you say, whereas now it's about a team effort and the contribution of everyone is important and appreciated, and I guess that hadn't been the experiences in the past so I can't say how long it will take (to change).....

They (officials) don't want to let go.

I think it's (decision-making) changing in that its very much more politicised and as I said earlier a lot of the decisions are based on political aims rather than on issues and the interests of the people and maybe even, the interest of the finances of the local authorities and the costs of projects, etc. ... so there's a lot of, in my opinion, undue political influence to try and sway things for some rather vague political objectives.

.... it's very exciting because frankly I think there is a mood upon metropole which is very different to what it used to be. Within the realm of metropolitan planning the technocrats have had an inordinate say, I think a disproportionate say; and the net result is, I mean you see constructions like the Cape Flats interchange at Fourways. You can stand on the top of that and you look across Khayelitsha and you say, "...you know here I am. I'm in an ultramodern highly sophisticated (world) standing on this concrete spaghetti junction. Not more than a hundred metres away I've got Third World Africa", and you cannot do that. So politically I'm saying there has to be a change in philosophical approach in terms of the manner in which we address the transport resolutions.

I think resolution is the big thing (in leaders). The resolve to do things is what should be upper most in people's mind. When they look at things in the long term, they should plan how it's going to be done and then from obviously the time to time to be looked at to see whether things should not be coming down, moving into the medium term the short term sothat, planning is progressive.

You know to be a strong leader in planning also you must have a vision. Of course you must have the know-how. Of course you must champion community needs and aspirations. I would say that it also the key. And of course you must have the resources, you can have your vision, you can have aspirations but one should have the resources to do that otherwise it is just wishful thinking.

I believe in collective leadership because of the various sort of strands and strengths that are requisite, it is unlikely they can be embodied in one person so you need that leadership. In this case officials, top officials and councillors.

... it looks like MTAB is designed to play (the leadership) role.

I believe there are people who are already, I *want* to believe, that there are people who are thinking along these lines at the moment. I would say politicians (are leaders) but I think also in the academic field, I mean that's as far as I can guess. I can't point out to you, look this institution, this governmental section (is a leader), I can't say that.

Every now and again you find a dynamic official....but I don't think we've got anybody like that (Solly Morris) now and it's probably one area where there is a lack that there isn't any charismatic individual who's going to lead this process. Not what I've seen.

Strong leadership is in place.Do I think strong leadership is important? It's not important, it's vital. You can't have a headless chicken running around. Somebody has to carry the can. The buck has to stop somewhere

Let's assume that the vision is a good one - a sound one - I think it plays a critical role. Somebody should get up and say - fine - this is what I believe in. If you don't have strong leadership, I think inevitably good schemes might just fritter away through your fingers. You need to have somebody who's - I suppose one would say - is evangelical about the concepts you believe in.

I think you've got a void at the moment - I must be frank with you.....You've got potentials, but I don't believe you've got champions of cause. Every cause that succeeds needs a champion. So you need somebody who fervently, obsessively believes in something and he or she preaches it on every turn in the road. People will begin to say "Wow, her reasons are very dedicated and I begin to believe in what she believes in". But if you say, "I believe her - can I have another cup of tea?" If people realise that you're just there to fulfil a role..... So I do believe you need champions - champions who are winsome, who are sincere and honest.

Officials

I think our (officials') power certainly increased significantly and will increase even more (once the) Draft Legislation from the DOT that has gone through Parliament. But I think that the province might have lost some power at the bottom and that filtered down to us it is a filtering down process, but then I think we picked up some power from the local authorities as well, because of mainly I would think, lack of capacity.

Power starts with business and their developments because they often ultimately they got the money and what they propose is often being treated very sympathetically, by the local authorities. So key players are certainly the developers and their land use and Transport Consultants, also things like government projects like the Serviced Land Projects those guys to a large extent do what they want. They've got a lot of power.

But then as you move up, I think the Province has lost some of its key people, at the end of the day the Minister of Transport is also a key player. The MEC is obviously a key player because he can decide this way or that way, and his support staff.

When you say a shift in power, I think there has been various movements in power. Purely on the basis in changes in the political arena and new players coming, who to a greater or a lesser degree are astute, are a forceful and very much come down to individuals to achieve their goals within the changing environment.

..... because of the power held by the DOT, it was very difficult at a lower level to affect changes because it was always subject to higher power, so with the development of responsibilities I think the potential to eliminate some of that is good, with it comes the tag of having to carry the financial responsibility for that.

I think it's important to stress that we're actually hoping to change the way these things operate because what has tended to happen in the past, I'm looking at maybe 5 or more years ago, was the politicians tended to have just very much a rubber stamping mode. Officials determined everything. If they didn't like something it just didn't get to the committee. Whatever came to the committee would tend to be rubber stamped and this is one of the major issues that needed to be sorted out. What we're trying to work towards now and in fact what the politicians are demanding, the newly democratically elected politicians, are demanding now is a much more integrated and a much more hands-on approach to policy development.

(Previously) the officials responsible for land use planning may have only met their politicians - their committee politicians - once a month! All the politicians knew about was what the officials were putting on the agenda in the meeting.

As I said earlier on in the past the power was very much in the top officials, with the councillors just acting as a rubber stamp. Very much that way inclined. It's now, the pendulum is swinging the other way. The political power, or the policy power, has to be with the politicians. Then we also have to be given free reign to provide them with the technical and professional advice on which they base their policy decisions and therefore we need to make those policy decisions as a team

The decision-making has tended to be ad hoc rather than strategic but I sincerely believe that that has started to change.

I grew up in a non-political local government system and since it has become politicised it's very different and the politicians are more involved now than they were previously...

I don't think we've got many of those politicians who want to become sort of immortal having implemented the MSDF or something like that, they too scared of that sort of thing. They rather focus more on their parochial interest.

Leadership is vital, absolutely vital, that is the story of Curitiba is that there was strong political leadership and that made all the difference.

(Strong leadership) is not in place - it is coming. What we lack is a political leader. Ideally one needs a Transport Planning Committee with a chairman or chairperson on that committee with vision of where he or she wants to take transport in 20/25 years time. And not just look to the next elections This is the big problem with transport planning or any planning. It is that politicians are looking to 5 year horizons - to the next election and that is not the time frame that one needs in terms of vision and that often causes the tension between the politicians and the officials. Especially officials who are committed to longer term planning. Politicians are saying "you are not delivering". I have still got people phoning me who are sitting in traffic for 2 hours, what can I tell them, "be patient?!".

.... I think it's probably better to have not such strong individual leadership so that things are more broadly debated. But you need to have - some of the decisions have to be bold and there one needs strength, I suppose yah, to convince a committee.some of these decisions are very expensive - big money decisions - and I suppose you need strength. You need strong leadership.

Well, I think it's (leadership) important but I'm not quite sure who should be providing this strong leadership.

I think we don't know where it's going to come from at this stage.

I think in an area like transportation planning, which obviously involves the public transport sector and all sorts of other stake holders, with disparate needs and agendas and so on I think leadership is absolutely essential to try and bring it all together. And certainly I would see the CMC playing this very important role in providing that sort of direction - that sort of leadership in helping people to come together and get direction work towards a common measure.

**Appendix F. Thematic analysis of Interviews – The
Official – Politician relationship**

Appendix F - Official Politician Relationship

Councillors

... we (councillors and officials) are working together. Because the councillors are the people who makes the decision, but get advice from them (the officials). There are town planners and there are engineers, so we cannot work alone. They need us and we need them.

Yes, I think that mostly I can say 75% we trust then.

Only a handful of people normally sort of speak (at meetings), or give a report back, but you do feel that somewhere somebody has been obviously working on this, because it's got to be done (decision-making). It's got to happen.

(The official) is supposed to take (the) councillor in charge of the committee to brainstorm, to plan (meetings) ahead....(They should ask) "What are the critical issues? What do we need to discuss? Can you go back to the caucus and come up with the issues with things that are the key issues?" I fail to see if that thing is happening....Then the other way to influence events is when Councillors begin to put questions in a committee situation....From my point of view, I am entitled as councillor to put questions, hopefully my voters will support me on these questions, because these are the issues I believe are critical to the people you represent. (After such an approach - the officials) they have to report.if the councillors, they are not conversant with issues, they just allow budgets to be presented without questioning(about) why they are so technical (they will not be representing their people)....

I believe even if you try to simplify them (the agendas), technically there is a limit. So even councillors, (if) they also don't develop themselves to a point where they can grapple with some of these issues, obviously then at the end of the day they will not be represented, they will just sit there in those meetings and make decisions, they will go through the motions and decisions will be taken anyway.

The politician who has a mandate from the electorate knows where he is heading, then he may not understand the best means to reach the goal, then the official will say that I think that land use, transport, rail, buses, a combination, is the best option to reach that goal.

Then while there is an agreement on all those issues, then the official can be told then OK go and implement. But it does not end there. The politician must ensure that there is a feedback and that there is monitoring, there is evaluation, then at the end at the day we are able to see if there are shortcomings. We are able to rectify them. So you will find that there is overlap but the implementation of the bulk of the work is with the officials, but that does not say that the politician would be disinterested

Well, these days we are very much sensitive for the inputs of the community as well and not just the politicians and officials. I think that the politician, after having come up with a vision of what should be, he should accompany the official, let him take the decisions, but be watchful of the decision that is being taken and see to it or always ask himself, as well as the official, "How does that blend with policy?" At the end of the whole of the process or during that, the society, the people out there will be asking questions to the politicians, and not to the officials. So whilst I do recognise the expertise, as well as I think the ownership, because I would want officials together with me to take ownership of policy as well. I still, at the end of the day, carry the responsibility and that's what the community will say to the council. It's because of *you*.

(Yes, from a generalised point of view you know) sitting on a thing like the Metropolitan Transport Advisory Board as a councillor, you're very much told what the officials want you to hear and I'm aware of that.....very often you get the feeling you're not making real decisions you know. Sadly.

You know there are 2 processes, the technical process and the political process and there's obviously got to be some better merging than exists at the moment. I don't think that politicians are in a position to make informed decisions, mostly.

The councillors cannot have a hand in everything..... you see one of the problems with some of the new councillors of *all* kinds is that they actually see themselves as supernumerary technicians you know and they don't distinguish between the technical process and the political process, so I personally think (probably because a lack of security in the role) too many councillors want to have a say in everything and it's practically impossible to do that and it could bog down the whole process if there's too much political interference, *I* think. So I think, probably, there could be less coming to council. I think you should really delegate as much as practically possible - politically possible - to them (officials) and see how it goes. You can always review it but probably not enough is delegated now.

.....the hard graft - the nuts and bolts of getting to that decision-making is done by the city officials or the metropolitan officials and they have their advisors ... they often have consultants or engineers and they come up with proposals and they come up with recommendations. From a political point of view we either accept the recommendations or we reject them; or we say the report isn't full enough - it needs more work, or we need to have some unanswered questions sorted out and then come back and then subject to that being solved we'll then make a decision.

I don't think any idiot can go out and make a decision on the transport interchanges of the Western Cape or any city or any town throughout the world, but there's a lot of back up by very good, very hard dedicated officials and it makes our job a hell of a lot easier and I'd say 90% of the time, if not more, the officials do their homework well, you know and really from a councillor's point of view, you're giving it a political stamp of authority. It's that simple.

Policy is politically made by the councillors and political parties. They will come up with recommendations for policy which will either be accepted or rejected depending on the policy, but again when it comes to running a city, a municipality or metropole - the nuts and bolts or putting everything together are done by the officials.....

Could you imagine the level of incredible corruption that could happen by giving officials *carte blanche* to just do what they want to without any political checks and balances..... they could expropriate rows of houses to put in a super highway at a huge expense, against the budgets and what have you. Now what happens is because there are checks and balances and they have to go to the politicians, (politicians) say - "we can't just go and afford to expropriate so many houses. We don't need such a big road. We don't need to spend that kind of money. There are cheaper ways to do it or we just can't afford to do it - period!" If the officials had *carte blanche* the budgets which we battle to stick to would just fly out the window. Now that's not a slight against the officials, but what it does say is that it (would be) too loose. It's too easy, you know, it's too tempting to want to go and do something crazy.

One needs to look at what you got. What you got at the moment is a cader, an elitist core, of transport planners, and I think most of the critical decisions are made by them. Alright, you have planners interacting with them but essentially they see themselves as an elitist core. I think the thing of planning as far as transport is concerned needs to be far more accessible to politicians and to the public.

The level of unsophistication is frightening. Even issues that are far less complicated than the issues that we are talking about.

Yes, I think it is a new experience for a lot of officials, that we now have a democratic system in place ... I think that time has now come that we should train officials in becoming aware of the new system and what a democratic system really means, and how they have to listen to what the public want Costs, timing, appointment, whatever, it is for me to decide on. And that I don't get (to make those decisions) ... No, I don't think the officials are a problem. I think the officials simply will have to be trained in the new concept. That's all. I don't think it is a particular problem, I think these chaps are well trained. We select the good people but they have to learnt to see it the right way.

That is my fight with our officials, I say we must now start producing. You must start giving us these things now. Now we've put officials there, we are giving them a good salary. The organisations are there, now we want to see something.

Half of the time, I don't know which are the officials, and which are the politicians. But there is no decision making process at these meetings ... Looking and listening to some of people and their input, one does not really

know whether they really would like to get involved, whether they are prepared to work and graft for the betterment. Whether they are just there to make up numbers and say "I have been to the meeting" and all that.

Let's start by saying we (councillors) *know* what we want, you see but in saying that, I don't think we've got a clear vision of exactly what it should look like..... I think they (officials) know, after all the seminars that they've had and the discussions, they've got a good idea about the way in which we should co-operate from now but in knowing what is the new way, or the new system of, co-operating is about is one thing and implementing it is something different. Because it (co-operation with politicians) entails that you need to let go of many of the old ways of thinking and notions that you've carried along with yourself and explore with your colleagues that new relationship, and that's difficult.

They believe, as I've said, *I* must be the boss and I must be in charge. But that goes for me as a councillor as well I think they (officials) need a great deal of more clarification as to what role each (politicians and officials) has to play. As I said the distinction between the technical side of the decision making, the actual logic, and the political thing is very vague (previously) the councillors were trying to be planners and the planners were trying to be politicians you know and it very often happens.

Definitely (politicians and officials are clear about their roles). There's not doubt about that - absolutely.

The current crop of politicians I think may have to be educated as to what their roles should be.

That is just my biggest point, you are working for the public not for the politicians. Not ANC or NP or DP.

Politics, if a person is really sincere about his input here, politics should not come into it. It is his input into this for the betterment of the environment area that you live here and for the people.

Once you start talking to the communities, then you are getting down to very parochial approaches and you need great skill to break through those parochial interests.

..... But, I don't know, you don't get the impression that there is a sort of correlation between what is intended to be done and how it projects and moves up the grade. Maybe they should be more open to the public about what they do and let the public influence them (the political people) as to the amount of money that has been made available to the roads. I feel that the public should know that there are some people in the budgeting area who feel that roads are not important and who are just reducing the volume of cash that has been provided and the roads are the life blood of the economy of the country and unless we move towards a policy of putting things back on rail, you are getting a the deterioration in road structure and yet an increase in the volume of heavy vehicle transport.

So the political decision making must in fact be, to a degree, informed by public reaction and it cannot be just a mechanistic application of models and of opinions of the professionals, it has to be a pot pourri of their input, the political input and the input of the people. So its a different mix we're talking about to what historically has been the case.

...we now have a democratic system in place, where the public have a say and I certainly noticed that, especially the older officials, grown up in the old system where they could make the decisions, they are having a hard time, because they are not used it and I see that is one of our major problems at the moment where the officials will have to learn to adapt to requirements of the public.

I think that time has now come that we should train officials in becoming aware of the new system and what a democratic system really means, and how they have to listen to what the public want. And yes, in the end we (the Councillors) make the decisions.

Officials

Politicians only really become enthusiastic about participating in something, if there is something in need for them. Well them or their area. If they can see some spin-offs for their Constituency.

I think there may be big differences (between politicians and officials), not that it is critical, I think one can probably live with that because at the end of the day the financial realities and the political realities will probably temper the visa view points on this. You get something sort of in between.

Not that it was going all that smooth (in the mid 1990's), I remember some of these politicians... they used to bring their body-guards and confidants and so on, and these guys would be their advisors, never mind all these officials! They (the new politicians) did not trust them (the officials) actually, they would only trust the guy who had a gun in his holster.

No it has changed a lot, but I mean those guys came out of the bush, and I mean they felt, that they were very threatened, although they were in power, they suddenly were in a completely new ball game. You know, some of them came from overseas back from exile and whatever, out of prison.

Unfortunately, today you find that many politicians want to intervene in things that they should not be intervening in. They want to get involved in all kinds of decisions that really should be left to officials. In other words, people that are expert in the field. I think it has something to do with suspicion, and with it could also be a bit of power grabbing or whatever, because some of them are actually accusing the officials of running their departments, and taking all the decisions. And it is not true, I mean, I can prepare the budget, and I can put all kinds of things in the air, and try and run things, but if it is not accepted, and if it is changed, then I am powerless, you know... And in any case, if something goes wrong then I will have to explain why the devil, did it not work.

But all that it means is that the officials in the end need to be more you know, it just requires of them to be more knowledgeable. To be able to explain to your politician what you are doing you know, if you don't know what you are doing then you are going to get into trouble. So you need to be able to explain to him..... Like in the case of Port Elizabeth, where they took these people overseas, and did some capacity building, which I think is necessary

Many of these people are sitting in high positions and they have never been out of the country, never mind, out of the Province sometimes, never mind out of the country. They don't know what all these things are about, but you talk and talk and talk, and they don't understand. So, you have to go and show them. And I think it is right, I am all for capacity building, and so on. It is necessary.

In this country the Constituency thing has not been very clear, the guys got involved in all various kinds of things that suit them, you know, maybe it was a business deal, pet hobby, or whatever. And I mean you also see this in Parliament, some of the guys don't even turn-up in Parliament, they not even there.

We're tending to use a 'member-led officer-driven' (approach). We call it 'councillor-lead and official-driven', where the politicians and their officials actually form a team in developing policy which is then being approved by the politicians and then implemented by the officials. It's meant that the interface between the officials and the politicians has become much closer and almost more vague, a bit blurred almost.

Now one's looking at a much closer interface where, between the formal meetings, you'll almost certainly find the chairman of the committees spending a lot of time with those officials talking about issues and thrashing things out, and you know deciding what *he* wants on the agenda.... So that interface is moving much closer which is good. It has obviously caused some sensitivities but it works pretty well.

There has to be a situation where the politicians control the policy, based on the technical advice, (obviously they have to take into account the technical advice of the officials) and then the officials have to be given the necessary authority and responsibility to be able to implement those decisions..... but there have to be checks and balances so that the officials can operate within certain parameters but if they need to go beyond those parameters then it goes back to the committee for another mandate. I think that's very important because if you don't have that, the role of the politicians, *vis a vis* the role of the officials becomes very blurred and as soon as you get those blurred..... it's only a cause for conflict. It's one of the issues we've had to face with especially the newly democratically elected politicians, who may have not had experience in the past of working in a bureaucratic system. Of them wanting to get involved (in the) day to day administration of services, and that has caused some sensitivity. Now one has to understand the background to that. Where it's coming from and one has to deal with it, you know, and it's been a learning process for everybody.

We work on the principal of political supremacy. If you are in a democratic system and public representatives have been elected, we work on the premise that "the buck stops with them" and the final decision is with them, and we are comfortable with that. However, one wants informed decision to be made, not just on the grounds of political expediency. So it is up to the officials to prepare the most comprehensive, the most accessible kind of report, and an understandable report, that if they do go against the report that is before them (that is the politicians) that they do so with the full knowledge that they are actually going to take a decision which is different to being what they are recommended to take.

My feeling is that they are generally comfortable (with the relationship between politicians and officials). Sometimes they might feel they are misled ... that the officials are really driving the show because they have the knowledge and they work with it and have worked for it for years and I mean many of our politicians have only come into political office since 29 May 1996, the local government elections last year, they have not been there for a year! But in general I would say that they feel comfortable.

Look there must be a system of delegation. I mean once the piece of infrastructure has been decided upon and is being built, there are always issues and problems that crop up on site. It is not my area of expertise but I just know this. And decisions must be made within twenty-four hours and officials must be trusted to make the right the decisions, on the ground, at the implementation level. There is a case for delegation but one cannot put every single little decision to a committee and even within the committee system, as I mentioned earlier, there are different delegations, the issues that go to full Council, the issues that go to EXCO, the issues that cut off at the standing committee level. There must be a thoroughly worked out and accepted system of delegation to officials, otherwise the administration grinds to a total halt.

As I said there's a lot of sort of political hanky-panky that goes on with those decisions that should be clear cut. I think that the way through this is that the politicians - the decisions shouldn't be made at a technical level independent of the politicians. Politicians should get involved at an earlier stage

Largely the ANC are new councillors so there's a lot more of a learning curve I suppose at the city than at the metropolitan council.

....look I think that (politicians should be involved) 100% at the policy end. Well when I say its 100% with, as much as possible from the officials. So they make it 100% a political decision only as advised by the technical people and once the decision is made, what the scope of the project should be, they (politicians) should be part of that, of course. But the actual details of it shouldn't concern them too much. I think that should be where the economic competence and the technical competence of the officials should ride.

Well look there's always room for education (of officials). We all have a lot of spare capacity between our ears. The politicians as well its very important for the politicians. I was at a meeting this morning and we were into the micro-organisation of the transport decision and clearly these okes didn't have the vaguest knowledge of what goes behind putting a transport plan on the table or getting involved with a strategic area traffic control system or something like that, so there's a huge need for (in the interests of transport, but I think in any political area) to build up the capacity of the politicians and certainly the officials must stay abreast all the time. There's nothing like experience, study tours, courses, that sort of thing.

..... the councillors shouldn't be too involved in the nuts and bolts, but they are essential in the system. If somebody has to go and argue money for us - who's going to do it? If we have to do any lobbying who's going to do it? Or where are we going to do it if we as officials need to do lobbying? If you don't have the councillors as friends you've got enemies - you've got a problem.

Well, I think, I get the feeling there is quite a bit of apathy in a sense. Politicians are not as fired-up and keen to participate at meetings like MTAB anymore. I don't know whether it is just a reflection on MTAB or if it is wider, because people are more busy and have not got time for so many meetings.

I think what is clear is that if you've got a sound proposal or defensible position and you can convey that, you can use whatever means, you know through some of these meetings or through correspondence, you can play a certain role a very effective role, I mean it even, I think a good example, even consultants, if they feel they've got something to say, the opportunities are there, for them be heard.

Politics are getting too close to the, I won't say Officialdom, but let us say, the 'Technics' of the business that we deliver. And the danger in that, is that as a professional I don't have a vested interest. As a Politician, I have a client base, and I can have a vested interest.

It is going to be the technicians who have the aplomb to drive that process through or to convince the politicians. The politicians just become a spokesperson on a rubber stamp if he is not sold in one direction or another. His power is his support base, so you'll need the commitment and I'm concerned about that. That will not be there. So whatever we deliver in terms of professionalism, in terms of policy, if we do not have the authority commitment to ensure that that vision and policy is made manifest, we are all just like outside. We may as well go home.

Now if (a politician) starts questioning me about administrative things I have to accept that that is part of the checks and balances, you know. I'm accountable to him as an elected politician, and you know have to accept that. You know its just one of those things. If you're living in a political environment you have to accept that.

... I think (the politicians) are perhaps a little bit too involved. At this point in our country I think its necessary and I don't resent it at all.

I suppose those who are cutting their teeth at the moment think that it's a bit more politically driven than it should be. I think that the roles are fairly clear. Well certainly clear, you know if anyone had to say who's job is it to do this particular thing, the answer would be clear. When it gets down to actual things and when you get intrusions, then you get people crossing the line.

The new councillors some of them are still feeling their way. I'm not sure that the (experienced) councillors always understood their role either. Very very certainly a councillor like would know exactly what his role is supposed to be, but he doesn't always work that way.

I think at the end of the day they (politicians) want to look after the interest of their Constituencies and of their parties. And so they play the big politics and the small politics at the same time.

**Appendix G. Thematic analysis of Interviews – Cynicism,
Apathy and Frustration**

Appendix G – Cynicism, Apathy and Frustration

Councillors

Yes, it seems very difficult to reach decisions at all. That is the thing and I mean this has been the position for a long time, that maybe there are different agendas between the various facets of the interested parties ... in private enterprise we are so used to looking at a subject and taking a decision, good or bad because a decision is better than no decision, even a bad decision and one gets the feeling that so much in the transport field, it's no decision, no decision and then ... time passes then they say "well, we had better get another report", and that seems to be the area where they spend, although we've had cuts in transport budgets etc, the one apparent area where (there are) least cuts, is the 'report-getting' area. Look, it is a great problem, the fact they have not got enough money. They are working with a very restricted budget and a constantly more restrictive and restricting budget. So, the priority schedule has to diminish, I don't know. Everybody re-examines the schedule and then come out with a new priority schedule and then next year there is less money so they re-examine this schedule and come out with a new schedule In the meantime more studies are made. I suspect that it is jolly good for the consulting engineers. There does not appear to be an improvement in (the) direction of what they are going to do, as the money reduces. They don't seem to say "now how are we going to be absolute sure that they are going to do this, and we'll finish it before we start on that".

....But, I don't know, you don't get the impression that there is no sort of correlation between what is intended to be done and how it projects and moves up the grade. I am sure the people in the planning area would feel that one has been excessively critical of them. I don't know. Maybe they should be more open to the public about what they do and let the public influence them, the political people, as to the amount of money that has been made available to the roads. I feel that the public should know that there are some people in the budgeting area who feel that roads are not important and who are just reducing the volume of cash that has been provided and the roads are the life blood of the economy of the country and unless we move towards a policy of putting things back on rail, you are getting a the deterioration in road structure and an increase in the volume of heavy vehicle transport.

People don't appear to be able to tell them "look by the end of next month you have to make your decision." The things just run on and on. I don't know, maybe there is not enough sort of authority tree, a structured authorisation of who does what and where

Yes, I personally just feel that by going every two months (to MTAB) and you sit there for 2/3.hours, virtually to just get a little bit of a report back, you never really get into the meat of the subject where you can also be, sort of play a role, or play a part, in decision-making, on the way forward.

...somewhere along the line I really get frustrated. I know there is something going on (in decision-making). I like to believe but you cannot get into it, or find perhaps, input that one can make on that.

Half of the time, I don't know which are the officials, and which are the politicians. But there is no decision making process at these meetings.

Talks, about talks, about talks, nobody really want to get down to brass tacks and do the job.

Officials

I think that just the location of funds, the National responsibility towards transport and its funding of transport is a big concern, and has a major impact on what we do. I mean if we don't get major funds from the Dept. of Transport. national level there is no way that we can have a decent transport system in the future. So, that financial dependence on central government, or maybe on the province, but particularly on central government, has a major impact. But that actually leads to this problem with private sector sometimes. Because if you don't have money and private sector does, you cannot really influence the process very much. They tell you what to do.

I mean that financing is a big problem, because we need big money to get our Public Transport system back on track. And, by for example, penalising the motorist will do nothing to improve the public transport as a matter of fact these trains will fall apart in a couple of years time. Never mind the buses.

I think the lack of availability of funds and the inability to resource funds, has made people very hesitant about commitment with regard to projects.

Oh, yes, I was going down that route, having been somewhat critical or perceptibly negative up to now. I think that the Metropolitan Planning process has been extremely appropriately done in the sense that it complied almost to the tee, in terms of the requirements of transportation as enacted at that time.

I think the Province still is the most powerful Transport Authority and I think they want to remain so. Despite all the talks of delegation of powers, I think our (metropolitan) powers have increased even if it is only sort of, in some cases, just the power of comment and the power of influencing things, not necessarily the absolute power of you know, deciding this should go, and that.

This (decision-making) process is filtering down to the lower level, although I must say that many provinces have not really gone into this. It is again, political jealousy, you know, being scared of losing your powers...and handing things over to people (in some Provinces, not the Western Cape) that cannot really do their job.

The city should also be able to tax their people, they should also be able to have levies, now the levies was supposed to be from some sort of road pricing type of thing. But that was really never accepted politically, and was, I don't know, I think there were too many controls maybe even from central government on the finances of the city.

In any case, (local government) would then draw up these plans. What it meant was that you had a long list of projects and where the money ended that was all that you could build. Okay, maybe it was a bit of a futile exercise, on the other hand it did get all these cities geared up to work into one sort of set pattern and being a bit careful with their money, and only really doing the things that were really necessary.

I detect, my experience is, that there is still a lot of conflict in terms of responsibility which is inhibiting the decision-making process. I illustrate that by the move of Metropolitan planning from Core-City function to Metropolitan function, the change in the Municipal entities and the confusion that is brought about by the Transport Bill, in perceived devolvement of responsibilities. I think the uncertainty with the respect to responsibilities has a debilitating effect. So, nobody has wanted to assume power.

So, there are under-currents of uncertainty which obviously affect the decision processes and I think the pity of (not winning) the Olympics was that it actually created a ball and time on which to focus. You were forced to resolve these disputes. My fear is that they will continue because Cape Town has a history (of conflict) since Regional Council, since Metropolitan Council and new Provincial vehicles and changed Metropolitan *vis-a-vis* local authority structures. It's gone through a recent period of huge complexity. And when you try and manage transport, a transport dynamic within that process, it is a nightmare.

The funding of transportation, the source of funding in transportation has primarily come, certainly from a Metropolitan point of view from the Department of Transport. With the lack of (national money), you have developed an environment in which delivery has not been manifest, that has cascaded into discrediting historic projects, so the flux of time and inability to put things in place, the credibility of the paper product is brought into question.

Things are not happening. We can measure it on delivery. Things are not happening. There is something wrong, somewhere. And the other reason I say it is that we have never had any direction in public transport. There has been no entity whatsoever, that can remotely assume having had any responsibility for public transport.

Well, I think, I get the feeling there is quite a bit of apathy in a sense. Politicians are not as fired-up and keen to participate at meetings like MTAB anymore. I don't know whether it is just a reflection on MTAB or if it is wider, because people are more busy and have not got time for so many meetings.

**Appendix H. Thematic analysis of Interviews – The
Legacy of Apartheid and the Capacity of Councillors**

Appendix H – The Legacy of Apartheid and the Capacity of Councillors

Councillors

Many of the reports that are placed before MTAB as I read it at the moment, may well be unintelligible to many of the political appointees. Before those reports are actually framed, maybe the issues as intricate and complicated as would affect the ring-road for instance, need to be debated in a workshop with politicians and with professionals, rather than decisions been made largely in the profession arena.

People, they don't have to use technical jargon when they are presenting reports to Councillors (because) Councillors will not understand unless they have maybe a background in transport.

You can't really ask questions if you're not familiar with the subject matter..... But I've said to myself when I started, I told the officials right from the beginning, I'm saying to myself "you just don't know anything".

There is not enough analysis and not enough synthesis to actually put (it - the technical material) in an understandable form for those councillors who are not technically minded.

I don't think there's much wrong with the balance (of language) - it seems to be alright.... I think the *local* councils are a bit at a disadvantage because they, even more so than the metropolitan councillors, really have very little idea about what transportation planning is all about and they need the 'upgrading' more than anybody.

You know, whether you come from the Black or Coloured Area you don't have any knowledge of how the workings are of the council.

A lot of those councillors a year ago, it was frightening to see them at committee level but now they've actually come up and they (are) learning the ways and there are those that are much stronger than others

...and now I am talking politics, that we have more or less still a white government in the Western Cape. The biggest disadvantage is that we are still relying on expertise and on people trained in the old era. And I think change will come easier in the other provinces.

At the moment, there is a tendency to form these exco-Committee, and they have a chairman and tendency is generally that the exco-Committee must make all the decisions, and its still one of the relics of the old system and it is, in my mind totally wrong, because it leads to a lot of problems.....

The whole question of dealing with the status quo, dealing with the legacy of the apartheid city, I would say that is priority number one.

I don't think that we can in terms of time look at say 5 or 7 years (to achieve much change) because of necessity there are things that will be achieved over a much longer period. For instance, tourism, to those people in South Africa and also the Western Cape, who haven't had the opportunity to take part in the political process and therefore get themselves advanced, they're only getting into it now. So we've got a backlog in terms of education and training and education is something that takes a long time to do and at the same time to build up expertise in those fields because training and exposure creates expertise. So I guess from that and establishing a solid base, we're looking at time constraints for a much longer period than merely 5 or 7 years.

Of course if you do some studies here, you'll find some horrific things as a result of the past, which as far as some of the politicians are concerned, they don't want to do that. They really don't want to know, and this is bedevilling a more frank and open approach to planning because they keep on seeing it as a reflection on the past regime and so on. So there's still quite a reluctance to get involved in things like knowing the actual composition of the poor and exactly how poor they are.

... The political decision making must in fact be, to a degree informed by public reaction and it cannot be just a mechanistic application of models and of opinions of the professionals, it has to be a pot pourri of their

input, the political input and the input of the people. So it's a different mix we're talking about to what historically has been the case.

New politicians shy away from it (decision-making) and leave it to the one's that have been there a long time.

... It's not to say that there's no contribution that I could make from my side, in fact when I went there for the first time in January, I undertook not to say anything, and rather learn from what is being passed around (then) their representative came up to me afterwards and expressed his appreciation for the input that I've made. So I guess, afterwards I was thinking about it and I said to myself - "Was your contribution appropriate or was it not?" And I felt it *was* because I represent my Council, yes in a technical position, but mostly I think from the side of the people, and what they need

I need to do the learning as far as exposure is concerned. (Exposure that I need, should) be prior to those meetings and not *in* those meetings, because the meetings themselves is where you make contributions because I can't sit there forever for the next 2 years and learn from what people is saying around me. That needs to be done before we go to the meetings.

..... There were then times that we took a different decision from the recommendation that had been given to us by the officials, and with a sound background, we could convince them that - you've been looking at the problem from a technical point of view, but there are other areas which should also be taken into account. Sometimes it's not because of short-sightedness on the part of the official but simply because.....there should also be the human aspect, you see.

The difficulty in this whole thing is that I need to think in 2 ways at the same time, that is, being community orientated for what is the best for the community and then also being politically minded. It's very difficult, I can tell you. And in one or two occasions so far I was almost led into major blunders for recognising a particular trend almost too late. So okay, I've been lucky so far but I fear the day when I'll be losing one of them. It's very difficult, yah.

.... I've been on (a particular committee) since the transitional phase, we had quite a lot of councillor orientation. There's been none on the planning side, it's just assumed that all councillors (know)....I think this should be remedied if the decision making is to be better, there's got to be fuller information and I think that's a major (issue). I raised it at the last meeting but it was largely poo-pooed. People said,"...but you're here surely that's why you're chosen", but that's not quite the point. In our council in the south there are quite a lot of 'privileged' councillors that really have very little idea of what's going on. One councillor went to sleep the other day ...

... There are some others that really I think don't know what's going on and are perhaps frightened to say so - to ask for explanations.

I can tell you there are councillors who have little or no idea about urban planning, certainly at the level that I'm used to and I don't say that arrogantly, I'm just saying that's a fact.

.... We're supposed to be working one council meeting a month, and one committee meeting a month and no more than one outside body meeting a month which is 3 days a month, i.e. the duties of an ordinary councillor and I can tell you now that as a councillor in Cape Town, and I'm not even on EXCO, I'm probably working about 3 - 4 days a week, so it's almost like a full-time job. So you can imagine every time a course comes up, and my business is suffering very badly because of this, it's very tricky to get me to go to a course. It takes no priority; and it shouldn't, it should take high priority.

There is an inseparable tie-up between those two (land-use and transport). One cannot subsist without the other and with due respect to the average politician I don't believe he has the understanding of that problem.

There will be a number of politicians who have enough sense to make that kind of decision (at-grade versus grade-separated junctions) but the average politician (does not) Capacity building may be a very desirable thing there's a jargonism that needs to get away. One needs to translate for new...councillor colleagues.... (into) terms and language that is common language.

... Whether politicians should be drawn into that (career enhancement through education). The level of unsophistication is frightening. Even issues that are far less complicated than the issues that we are talking about. I'm not quite sure how you're going to do that.

I must just mention for instance, the Northern Province is being very realistic about this. They know that at local level there is very little capacity, and therefore they are sort of almost agree with their local authorities that you know, for the next few years, everything will be done at Provincial level. Everything as far as policy is concerned. Of course the local government people like in Tsneen and Petersburg can surely run their own affairs according to their by-laws and so on, as they have always done.

Officials

I find it very worrying, because then you can have a situation where a fairly simplistic solution to something may sound very nice understandable and that is the way the politicians go. But somewhere along the line you know there may be enormous hidden costs that ... and there is often no easy way to deal with highly technical issues, unless the decision makers are fairly qualified to understand this.

Certainly in the old days they (councillors) were comfortable with it (the technical level of reports) which is why I say it was just rubber stamping. With the new politicians, obviously at first there was a problem of, perhaps the need to build up trust, so initially there was perhaps a lack of trust so that they would question everything and that was their right to do that and it was something we expected would happen. But I think you know as that trust is building up, they're recognising that we have certain technical expertise and in terms of our technical expertise we will make certain recommendations and the rest is up to them basically.

I think most of the politicians just close the book on the technical stuff - on the highly technical stuff. Some try to make mileage out of it for their gain.

Well look there's always room for education (of officials). We all have a lot of spare capacity between our ears. The politicians as well..... its very important for the politicians. When I was at a meeting this morning and we were into the micro-organisation of transport and clearly these okes didn't have the vaguest knowledge of what goes behind putting a transport plan on the table or getting involved with a strategic area traffic control system or something like that, so there's a huge need for - in the interests of transport, but I think in any political area - to build up the capacity of the politicians and certainly the officials must stay abreast all the time. There's nothing like experience, study tours, courses, that sort of thing.

The Transportation fraternity, Professional Engineers are traditionally conservative.

**Appendix I. Thematic analysis of Interviews –
Information and Agendas**

Appendix I - Information and Agendas

Councillors

... We now have a democratic system in place, where the public have a say and I certainly noticed that, especially the older officials, grown up in the old system, where they could make the decisions, they are having a hard time, because they are not used to it. I see that is one of our major problems at the moment where the officials will have to learn to adapt to requirements of the public.

I think that (the) time has now come that we should train officials in becoming aware of the new system and what a democratic system really means, and how they have to listen to what the public want. And yes, in the end we (the Councillors) make the decisions. We are called upon by law, to make informed decisions and the biggest resentment at MTAB for instance, is that I feel that if you dish out a lot of papers when councillors come into a meeting and throw a lot of new projects (on) their desks in the form of loose sheets, then I cannot make an informed decision, and I have told them so. And I have actually discussed resigning if that carries on I resent coming into a meeting and having incomplete agenda's.

It (the agenda) is too big. So there is a need to get all the information but it is too much sometimes.

Well, I think they give us an awful lot of information. I think they give us more information than really necessary to take decisions. They give us all the background information and then leave it to us to digest that and to come to decisions on that. I do believe that there should be much more effort made to identify the major factors that are influencing either its movement ahead or on its non-movement ahead of a particular aspect and people should be asked to sort of concentrate on those things. If you need background, well then the background will be given, but I feel this vast amount of information that has been given in advance actually works against decision making, not helping it. I don't know. I think we have become so jaundiced in relation to the future of roads and one hardly ever believes that a road is actually going to ultimately be built because of the shortage of money. My immediate vision reaction to documentation is the (my God) size of it. I might be missing the statement. I expect I am no different to anybody else. I certainly don't sit down and read the whole bloody thing.

I personally like to read through it in order to get a good (idea) and a bit of a gut feeling about what happened or what can happen, or what should happen. Yes, like to work through it, the same goes for town planning in this area. And our manuals are normally about that thick, but, yes, I just lock myself away and I love it.

I (would) like *more* information.

You just get the format, the income, the expenditure with no breakdown, there (are) no details to explain "we are doing this, we are going to achieve this and that, (and) why (we) do this, to achieve this and that".

You would not get from the budget ... a motivation and a breakdown. We ... do not get those things spelt out in the budget.

I am given too much. I get delivered here probably 500 sheets of paper a week it is too much and it is confusing. There is not enough analysis and not enough synthesis to actually put it in an understandable form for those councillors who are not technically minded.

.... It's not easy to present it to suit everybody but at the moment I think too much has been presented and it's not necessary to make decisions.

I would put it to you that the average politician (who) goes to the average meeting with a bulky agenda, he never really wades through the support documentation or very seldom does. If he does he skip reads or air reads the titles so his decision making could well be questioned, as to whether he's applied a reasonable mind to the issues before him.

I find this (the preparation of agendas) very ad hoc and I find that the officials often put in their reports and agendas what they really want to get rid of, which they think is safe. A lot of decisions they make themselves, but So no, I don't think the real crucial issues are often sort of directly by us.

And it is a devious roundabout route they go, the most important thing is they appoint a consultant. Now, this consultant goes along and what he has in mind normally goes, because he is not properly checked and his costing is not properly checked. With the result that we end up like we now sit in Khayelitsha with standards of services which are far too high. Now comes the bottom line. These people cannot afford it. Now we say, "who is responsible?"

The different officials network, and get agreement and understanding "that's how things should go". If you have already agreed with the Province of 'that's how things should go', then it will be very difficult for (officials) to change, because of pressure from politicians. Politicians (should be) part and parcel of, I think, identifying the problem and you know setting the agenda

I think what needs to happen, in actual fact, is the person who is say chairing a committee, that (should be) a politician.

There is not enough analysis and not enough synthesis to actually put (the agenda) in an understandable form for those councillors who are not technically minded. They just give you the lot and, of course, there hadn't been resources recently to do anything else.

Officials

Yes, I mean I have thought about this at the Moving Ahead (committee). I mean the more informative you want to be the more information you put on the table, the more you confuses the decision-makers and the politicians.

I will just show you this which is part of the Council Agenda for last month and that is a pretty inaccessible kind of document. There are land-use issues here and there are transport decisions here. I think a lot of the Councillors find it intimidating and inaccessible, that kind of document, and we are going to have to respond to that as officials and say aren't there better ways of communicating and getting the politicians involved in decision-making and understanding the issues more?

I think most of the politicians just close the book on the technical stuff - on the highly technical stuff. Some try to make mileage out of it for their gain.

Unhappiness I would say is more with not getting their agendas in time in order to be able to study the stuff. That is a frequently raised issue.

I think they (the councillors) have found (the system) bureaucratic and cumbersome and frustrating - they do - because they are well aware of the fact that the agenda is at the mercy of the officials, and for them to try and get things on the agenda was, in the past, not necessarily easy.

**Appendix J. Thematic analysis of Interviews – Transport
Terminology – A Common Language?**

Appendix J -Transport Terminology – A Common Language?

Councillors

How far ahead should a vision look?

Because we cannot do things over-night, I would say 5-6 years.

Medium term, long term and short term? I don't know. I think in road construction short term is probably 2, 3 years and medium term would be anything up to about 8 years and long term would be over that I think.

I believe 5-10/15 years. You have got to look at your roads that are going to take the most traffic.

Long-term, maybe looking to 15/20 years. (A vision) is very, very important because actually it illuminates your path, forms where you going, gives you a clear direction.

I'm saying that planning should be no longer or advanced than say 5 to 7 years ... I think that one must have a vision but I believe that the mistake, and I make it myself from time to time, is to have a vision that must stay for eternity ... I believe one should have a vision in terms of the situation as we understand it now and to what we can more or less determine will develop from the events that are known to us but I don't think one should have a vision that will last for the next 20 or 30 years, that isn't possible.

Every time you predict human behaviour beyond a couple of months, you're in hazardous territory but obviously in transportation you've got to - I personally don't think you can look forward much more than 10 years at the most and even then it's pretty hazardous and probably 5 is nearer what's practicable ... 10 years at the maximum is what I would choose (for a vision) and for more concrete things very much less than that.

I think, I wouldn't like to quote a vision myself, but I think a strategic approach to it (is what you need). You really can't do much without having a vision, and a mission, and all the other aspects of strategic planning. I think it's quite important to know what we want to do, you know. No, I think its important to have a vision

Minimum? 50 years ... (a vision is) crucially important.

... I would say when you get a change in a political government, that would be the time to think in terms of saying "I can plan as far as that". So I would say that planning would have probably a 5-year span, where you can plan with some degree of confidence.

I think (a vision) is (important) but it has to be cast in broad terms, rather than very specific terms.

Is there a vision in place now?

I would say for the short and medium term (there is a vision in place) because I think for example the budget for the Olympic related projects was up to 2000 or something but I don't think currently there is a vision in place beyond that, because for example the functional metropolitan bridging goes beyond the current boundaries of the CMC.

I believe there is a vision but I don't think it is (as) coherently put together as I would want to see it. I think then we would've had it in a document, that vision being spelt out to the public. I believe because of the lack of coherency that I as a councillor and therefore the public in general isn't able to say that for Cape Town that *this* is the vision. It's not there. We are still in the process of doing it. But I think part of the problem is that we've only recently embarked on the road of the so-called 'New South Africa' and therefore thinking *new* for South Africa, and at the same time having to deal with so many different things, because as I've said earlier, what you do in other areas, how you handle it has an impact on transport so you need to succeed in many areas because it has a cross effect on one another.

There are lots of little bits of paper around with various visions, you know Cape Town city council had them and the CMC done a few exercises, and there's a lot of paper. I mean you would be horrified at the stuff that I get at my level and it needs to be got together and we need to bring in together land-use and transportation to try and get a co-ordinated vision of the future for both of those. So I think there's quite a lot work needed actually. Quite a lot of people had a stab but none of it's been all that remarkable that I can remember.

I think to answer that absolutely, honestly, yes, there is a vision. I don't think it's long-term enough because I think their vision, the outer limits, is 20 years whereas I'm saying the vision should be 50 years. You know when you're talking about a vision you've got to say in 50 years time the population is going to be 7 million. Can our current transport infrastructure handle 7 million cars, buses and rail? That's the thing.

At the moment it is in a kind of a wishy- washy-whoosh-thinking about it but it's not formulated and down on paper and "here we go let's run - that's where we're going."

Officials

How far ahead should a vision look?

... One has to have a vision of the future development absolutely and it has to be macro-development to legitimise a rail corridor, so therefore it has to have a macro-vision: 20 - 30 years.

I think it's extremely important. Absolutely important. That's why we've set up a vision for this council. We're saying in 20 years time this is what we see happening, because although it may sound like a utopia, if you haven't got some idea of what you're aiming for, in a long term way, you know, you can set up short term goals which may not necessarily all lead you to that long term vision. So I think it is important to have a long term vision, yah.

OK, if you look at this document (MSDF). This is 20 to 25 years, that is what we define as long-term ... (A vision is) vital, absolutely vital.

I don't think that we can plan much further than 15 years ahead. We can think about 20 years but I think the sort of influence that we have today will wane at the 15 year horizon, I think that's about it and in fact 15 years isn't long these days I think.

I think that its important to have a vision for the future because I don't think that one can carry on playing the same old tune with the same old instrument all its life.

(The Provincial) green paper is aimed at things that are probably 20 years plus in many instances (but) other things though may (have a vision of) 5 years.

Is there a vision in place now?

Yes, one can talk about that for hours. There is a lot of talk and a lot ideology and lot of good intentions. But I think the big problem is they ... I don't know if this is the problem with Cape Town, or with the Cape ... they often don't adequately take cognisance of the realities of the actual understanding, the actual trends that are there, and basically I mean it is a case of having a vision that looks that way and the reality that is going that way and everybody agrees on the vision for whatever reasons, but the reality is still galloping along in a different direction, and the two aren't being brought together. The only thing is, whenever you're busy with sort of visionary workshops and whatever, and you relate to whatever the reality is, people don't want to know about it ... because we are going to change, intervene, all those words, but that never happens and it is because I think those realities are not adequately connected to the vision or whatever. And those connections, I mean, this reality, rests on very powerful economic forces.

... If anybody believes there is a magic vision that we can achieve, it is not it is going to be there, unfortunately, I mean I'm even wondering about the MSDF, I just shake my head. Some of the most prominent and forward thinking planners worked on the MSDF and supported the MSDF and we were often accused of not fully appreciating this MSDF story. We had some specific concerns, questions which were never properly answered and therefore we had reservations. I think we were right to express that.

I think we are getting it (the vision) in place. I don't think it is fully there yet, as I intimated earlier, but the general trend is to say "let's have a long-term vision".

(The vision is not in place yet). No, not yet. Slowly it's forming.

There's transport studies on the go - things like that. There's been all sorts of things in the past. What I was hearing was that we have a vision but we are quite prepared to change it if we can get good projects coming along that will add a bit of rates income or add a bit of voting power or the usual problem. I think it's essential to have a vision for you to be working to, but others seem to regard that vision as been very amorphous.