

Introduction

Wits Professor Alan Mabin has described how road engineering of the 1960s significantly influenced the present-day Gauteng area¹. The freeway and high speed arterial plans designed by those engineers have had far-reaching impacts on urban land development and use. The Gauteng city region is sprawling and heavily reliant on private vehicles thanks in large part to the road policies of fifties years ago. This, plus the legacy of apartheid planning, under-pinned a public transport system struggling today to be financially viable. Most choose to buy cars as soon as they are able and those without cars are condemned to long, costly commutes. Transport is a heavy financial burden on households, especially the poorest. Transport is also now a significant contributor to environmental pollution and greenhouse gases, thanks largely to this reliance on private vehicles. A similar story has played out in Cape Town and Durban too, and to this day road engineering significantly impacts on how cities take shape and on quality of life of citizens.

It is important, then, for us to engage with policy about roads, and for Open Streets and others to answer the call from government for robust engagement on it. In March Open Streets responded to the Department of Transport's Draft Roads Policy, gazetted in 41488. This Policy Brief expands on that initial, short, response.

Guiding position

The principles guiding road, traffic and transport engineering and planning have not fundamentally changed since the 1960s. These principles are, basically, the safe and efficient movement of vehicles. In terms of sheer numbers, private vehicles outweigh freight and public transport vehicles. Not surprisingly, then, thinking about private cars tends to dominate road policy conversations. This is deeply problematic as thinking about *people* moving rather than vehicles leads to very different outcomes for roads. While the traditional road engineering concern with vehicle efficiency (and its' corollary 'overcoming congestion') is certainly a factor in transport planning we need to look elsewhere for principles to guide us into a better future.

The South African Constitution has relevance to transport in many ways, including the need to "...heal the divisions of the past..." (Constitution preamble). One practical 'division' between people of different income, age, race or gender groups concerns *access*. This is profoundly impacted on by roads and transport policy. We are also called on by the Constitution to "... improve the quality of life of all citizens". In lower income townships especially, road space is an important public space and so roads policy has a material bearing on quality of life for those most in need of public policy support. The impact of roads policy on travel, mentioned already, is also key to quality of life.

¹ Mabin, A. (2013) ['The map of Gauteng: evolution of a city-region in concept and plan'](#), GCRO Occasional Paper.

The traditional idea of ‘safety’ considered by traffic engineers, and embedded in their thinking, is also focused on vehicle safety which is different from a focus on human safety more generally. It may well be, for example, that a safer pedestrian environment will be a less vehicularly efficient one. These trade-offs are rarely discussed in roads policy because vehicle efficiency paradigm dominates. It is hardly surprising, then, that the South African road safety record is so poor.

Over-arching view on the Draft Roads Policy

Our over-arching view on the Draft Roads Policy is that:

1. Although the policy in several places discusses in detail issues of human movement (especially in sections related to NMT) and human safety (under Road Safety), these aspects are not properly integrated into policy statements about Roads Infrastructure (under Section 5).
2. The document also talks at length about sustainability but this is also not integrated well into Roads Infrastructure.
3. We are thus sceptical of the ability of the Roads Policy as it stands to materially impact on NMT, road safety, universal design and sustainability unless there is far deeper integration between these Policy Statements and the Policy Statements under ‘Road Infrastructure’. We expect that this integration will require some difficult but necessary debate.

Specific Concerns

1. *Fuzzy logic document goals and policies*

The document as it stands has fuzzy logic. For example, the stated goal of the Roads Policy is to “provide an equitable access to a safe, well managed, sustainable road network”. This over-arching goal does not provide a clear policy link between road and land-transport policy, despite several mentions of the need to do so in the document².

A suggested alternative is: “The goal of the Roads Policy is to provide the road infrastructure needed for equitable access to economic and welfare opportunities via a safe, well managed and sustainable network.”

2. *Lack of clarity on the hierarchy of roads planning and urban transport planning*

The document seems to contradict itself on the hierarchy of roads and urban transport³, saying “Roads master planning...must be aligned with local authority planning,” yet in the

² See page 8; Policy statement 11 (b); Policy statement 12; Policy statement 13.

³ Compare Policy Statements 11(b) and 6(a) with 6(b).

event that alignment is not possible “roads planning will prevail.”⁴ This opens up the real possibility for high speed national road planning to set aside an urban strategy of travel demand management (TDM), despite TDM being a stated policy⁵.

In practice, the precedence of national or provincial roads policy over urban transport policy or otherwise will vary according to location specific economic, environmental or social concerns. A process will thus be required to resolve such concerns.

A suggested alternative wording for this is: “Where there is a dispute between national and provincial Roads Authorities and local Transport Authorities then a mediation process will be used to resolve the dispute.”

3. *‘Technical’ governance and public oversight*

The document places responsibility for many key decisions on ‘technical’ bodies whose processes, governance and oversight is not stated or is unclear. For example there is reference to COLTO whose work, according to the Policy, will be complied with⁶. Such ‘technical’ bodies can yield considerable power in decision-making processes. Who, though, decides how this COLTO body is constituted? How is their work mandated and where are the transparency and oversight processes?

Our suggestion is that ‘technical’ bodies need to be both technically robust and have democratic and representative oversight by non-technicians.

4. *Historical context, politics and roads*

Given the history that roads have played in separating communities in South Africa, roads policy cannot ever be considered as sitting completely outside of politics in an objective ‘technical’ realm. Any roads policy work which continues a business-as-usual path (and especially those documents with a long heritage) need to be critically reviewed, in light of our historical context of separation and of prioritising (previously mainly white, so-called) car users over (previously mainly black, so-called) pedestrians.

Given that the Roads Policy is said to “Prescribe...guidelines and frameworks...” and promote compliance with the same⁷, these ‘technical’ documents are crucial mechanisms for delivering on promises of equity, access and safety, or not.

⁴ Policy Statement 6.

⁵ Policy Statement 13.

⁶ Policy Statement 8

⁷ Page 7, and Policy Statement 8.

For example, there is reference to a study⁸ from the 1980s which “must [also] be considered”. The use of the Road Classification and Access Control Manual (TRH26) is referred to as a matter of priority⁹. TRH26 is also cited as defining the ‘desired level of quality’ for ‘a certain level of mobility’ on the Strategic Road Network¹⁰.

Internationally there have been moves to substantially revise approaches to road design documents such as these. Complete Streets in the US and the Manual for Streets in the UK, plus the NACTO Urban Street Design Guideline and the DUTCH SWOV Manual all provide examples of what the more recent thinking is. This needs to be taken into account.

We suggest that ‘technical documents’ for roads need to be transparently prepared, subject to robust public discussion and revised in light of international best practise, overseen by representative committees from across professional and concerned user groups.

Similarly, road classification is a key ‘technical’ process which has widespread social and environmental consequences and needs to be developed in processes transparent to the public.

5. *Trade-offs and also possibilities for integration between efficiency, safety, sustainability, universal design, ‘green’ roads and employment not made explicit*

The policy makes an array of policy statements but these are not integrated across one another and particularly into policy statements about road infrastructure (section 5). For example:

Policy Statement 9, about Road Asset Management, does not make mention of road safety.

Policy Statement 12 - All Road Authorities promote the integration of roads with land-use and developmental objectives - makes a series of statements about land-use and development integration, but the term ‘promote’, rather than ‘require’ weakens the statement and implies a lack of true integration.

Policy Statement 15 - All Road Authorities will develop a ‘green’ road network which conforms to the principles of sustainability - could be reasonably expected to impact on Policy Statement 20, on increasing employment opportunities, and also Policy statement 10, on road maintenance, but the opportunity is missed.

⁸ In Policy Statement 2

⁹ Policy Statement 1

¹⁰ In Policy Statement 9.

6. *Safety discussion dominated by non-road policy matters and does not address the underlying traffic and road engineering design issues*

Chapter 5 on road safety is comprehensive which is understandable in light of the road safety problem in South Africa, but it fails to address the key issue that is road design and engineering itself. Despite evidence to the contrary, road design guidance and practice is implicitly assumed in this Roads Policy to be unproblematic and not in need of attention. We strongly dispute this.

By means of example, the following table describes the Policy Statements relating to safety:

Safety Policy Statement	Focus
36	Institutional structures
37	Law enforcement
38	Data capture
39	Databases
40	Road safety audits
41	Education for learners
42	Corruption
43	Research programme

Only one, on road safety audits, is related to road design. Our poor road safety record strongly suggests that a more critical look at our current design practices is urgently needed.

Our suggested additional policy statement is:

Road and traffic engineering design practices, guidelines and training need to be reviewed in line with the most recent international best practices for human-centred design for safe roads.