Proposed improvements on the R44 between Somerset West and Stellenbosch

Comment

on the Revised Basic Assessment Report by CCA Environmental

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1 Additional Comments

- 1.1 The Revised DBAR is totally inadequate as it has failed to address the issue raised by myself, by informed traffic experts, by the Stellenbosch Municipality itself. For that reason, I resubmit the comments of 2014 below almost verbatim. They remain valid and have **not** been adequately addressed in Appendix F10 of the RDBAR.
- 1.2 Activity 18 of LN2 does not explicitly say that only **new** roads have environmental impacts. Upgrades to **existing** roads do fall under "design of associated physical infrastructure" as defined in Activity 18.
- 1.3 Specifically: the response to item 2.10 of said Appendix F10 and to my comments in item 2.14 regarding **integrated planning** is inadequate or worse. Having pointed out that Province is supposed to follow its own policies and those of the municipality regarding integrated planning, the response that the RDBAR merely addresses **safety issues** is (a) incorrect, (b) mendacious in that it excelicitly sidesteps the actual issue of integration and integrated planning, (c) once again narrows down the discussion from the start to one small aspect.
- 1.4 Safety is not the only issue. The real issue is integrated planning, of which safety is a small part. The RDBAR does not address the real issues.
- 1.5 The response of the RDBAR in item 2.14 Appendix F10 is clearly incorrect. The project proposals are **NOT** compatible with the policy frameworks. They fly in the face of all the principles and best practice of integrated transport planning.
- 1.6 As pointed out many times, the viability of public transport is a function of integrated planning, which includes hardware but also traffic management, human behavioural changes, . The RDBAR's narrow focus on engineering issues is exactly the reason why public transport cannot become viable. Single use of motor cars is only "viable" because engineering solutions like the one proposed make them so. Once again the RDBAR fails to acknowledge that issues are integrated.
- 1.7 The RDBAR makes strange statements like "The project in no ways precludes the implementation of public transport initiatives to alleviate congestion on the route." That is incorrect. It **does** preclude the implementation of public transport initiatives, for example because hundreds of millions of Rands which would be spent on roads could be spent on public transport etc.
- 1.8 According to the RDBAR, it is the "DTPW's responsibility to manage and maintain the existing provincial road network". Management and maintenance are indisputably necessary. Why does the RDBAR make the illogical jump from that self-evident duty to a purported responsibility to engineer large and expensive upgrades? Why not acknowledge that with the growth of traffic, responsibility is not just to the traditional functions but to the broader and more future-oriented public transport solutions?
- 1.9 If the DTPW refuses to adapt to changed times and circumstances, it may be time for a management overhaul or restructuring of this and related provincial departments. The function of top

management is not to cling to outdated concepts and models of transportation, but to embrace and implement policy documents as a whole.

- 1.10 The response to item 3.6 (also item 3.4) as set out in App F10 regarding a simple reduction of speed limit to 80 km/h is similarly inadequate. The RDBAR merely points out that 100 km/h is "recommended". No facts are provided; no substantive reply is made to the reasonable and simple solution to the safety issue of speed reduction. As pointed out, a reduction to 80 km/h basically solves all the safety issues. It also results in a minimal increase in commuter time, given that the major delays occur at the intersections.
- 1.11 To repeat: the comments below were submitted in 2014 and have not been addressed by the Revised RDBAR.

2 Environmental Impact Assessment rather than Basic Assessment

- 2.1 The Environmental Assessment Practitioner (EAP) claims that only a Basic Assessment is needed in terms of Listing Notices 1 and 3 (NEMA Regulations R544 and R546).
- 2.2 Item 1.6 of the IAP comments (Appendix F5 of the DBAR) refers. In this item, attorney Kim Schreuder comments that Activity 18 of Listing Notice 2 (Regulation R545) requiring Scoping and Environmental Impact Assessment rather than a Basic Assessment does apply.
- 2.3 The reply by the EAP to the effect that it does not is based solely on "discussions with DEA&DP and DEA" is inadequate. Activity 18 of LN2 states clearly and unambiguously that

"The route determination and design of associated physical infrastructure ... if (ii) it is a road administered by a provincial authority".

This wording clearly applies to the proposed activity of upgrading of the R44 itself; whether it applies to any associated secondary roads or not is irrelevant.

2.4 Neither the Environmental Assessment Practitioner (EAP) nor the provincial DEA&DP nor the national DEA has the authority to alter the above wording nor the authority to decide whether it applies to the R44 project or not. Interpretation of the law is the privilege of the judiciary, not of the executive. If there is an existing court judgement ruling on the applicability of Activity 18, the EAP should provide a full reference. If the EAP does not do so, I seriously doubt the veracity of the EAP claim that only a Basic Assessment is needed, and I believe that such claim should be reviewed in the courts.

3 Focus of the DBAR is far too narrow

3.1 Integrated transport planning and management

- (a) Integrated means INTEGRATED: The Integrated Transport Plans both of the City of Cape Town and of Stellenbosch Municipality are available and are even cited by the DBAR. Both these plans are unambiguous about the absolute necessity that planning should be INTEGRATED. The word INTEGRATED is understood by most people as "doing the planning together, not separate".
- (b) **Terms of Reference are far too narrow:** Rather than heeding the explicit goals and principles of these planning documents, the DBAR and its clients focus solely on a single aspect of the problem, viz. the upgrading of the road by means of large expensive engineering interventions. The very Terms of Reference eliminate all possibility of an integrated study. For example, the Economic Specialist Study starts out with

Other proposals that might improve the free flow of traffic, such as public transport initiatives, have not been considered in this report. These initiatives do possibly have merit but are outside the Scope of Work for this report.

Crucial elements of an integrated approach would include considerations of **public transport**, **non-motorised transport**, **spatial planning** and **encouraging or enforcing changes in commuter behaviour**.

- (c) By excluding these crucial elements, the Specialist Study and all conclusions based on it — put themselves beyond the explicit goals principles of the national, provincial and local transport planning documents.
- (d) It is understood that such an integrated plan would exceed the capacity of CCA Environmental or the consultant engineers. Yet that is no excuse:
 - At the very least, eliminating crucial elements and variables from the study implies that its conclusions are worthless, simply because the alternative (of public transport etc) is not even considered.
 - A simple thought illustrates the idea: Why has the client (the Western Cape Government) not commissioned an alternative study wherein the budget for the estimated costs of R300million to R500million is allocated to a massively expanded public transport system on the route? How can the present conclusions be believed if such alternatives have not been studied?
 - Worse still, should this plan and project, focused as it is solely on roads and motorised traffic, be implemented, it would prejudice and pre-empt proper solutions over years or decades.
 - It is well known, for example, that public transport will become economically viable only if the personal cost of current convenient but unsustainable behaviour of single-occupancy vehicular traffic is raised beyond the perceived cost of using public transport. People have to be PUSHED away from motor cars and PULLED towards public transport. The proposed intersection and road upgrades would sabotage the necessary PUSH-AND-PULL dynamics for years.
- (e) Moreover, to be comparable to the present DBAR, the corresponding public transport, NMT, spatial planning etc aspects **should also be extrapolated over the next 30 years** as the DBAR unsuccessfully tries to do. Long-term planning is essential, of course, but it makes sense to plan only for eventualities or cases that are reasonably probable. Likely eventualities include population growth, scarcity in natural resources, better communication technology etc. Economic growth at constant rate over the next 30 years is **not** likely. The evolution over 30 years of most variables is highly uncertain.

The high probability of population growth and scarcity of resources is precisely the reason why planning for public transport should take precedence above coping with the latest traffic jams and accident statistics.

3.2 Speed limit option

(a) As set out above, I strongly disagree with the inappropriately narrow scope of the DBAR. However, it unfortunately has eliminated viable traffic management options even from that narrow scope. In Section 4.5 (page ix) of the DBAR Executive Summary, we read the astonishing sentences:

Various options were considered early in the conceptual design phase and identified by I&APs and were subsequently discarded as not feasible or reasonable to meet the project requirements and were thus not considered further. These include: ...Reducing speed on the R44 to 60 km/h.

(b) There are no arguments motivating this and other eliminations from the study and no numbers to back them up. This means that the NEMA competent authority (in this case

the DEA&DP) cannot realistically compare the present recommendations to an alternative based on an overall reduction in speed limit to 80 km/h, as proposed by myself and various other IAPs in previous rounds.

(c) While the DBAR does propose Average Speed Over Distance (ASOD) measures, these are not the same as the above proposal. The DBAR implies that ASOD will be implemented on an average speed of 100 km/h or even 120 km/h. The ASOD recommendations in the DBAR therefore do not address the above criticism.

4 The economic specialist study (Appendix E6)

- 4.1 As already set out, the economic specialist study starts off with the wrong Terms of Reference and should be dismissed for that reason alone. All the numbers and its conclusions — which form the chief motivation for the main DBAR's conclusion — are based on the incorrect premise of ignoring crucial policy requirements and eliminating viable alternatives.
- 4.2 It is easy to calculate huge cost benefits due to **Cost of Time** factors. Taking a simple figure such as R156.39 over 30 years rather naively assumes, once again, that important factors would remain constant over 30 years.
- 4.3 The conclusions of the DBAR that grade-separated roundabouts (GSR) are the best options are based on the best BCR score achieved by GSRs. This best score is in turn based on a huge figure of R919.1 million (nine hundred and nineteen million Rand) of purported Cost of Time savings over 30 years. As Table 6–3 in Appendix E6 shows, it is this single R919.1m figure that dominates the conclusions of the economic analysis and hence the conclusions of the entire DBAR. The entire "best case" made out for grade-separated roundabouts is based on a single very large and very uncertain calculation of Cost of Time benefits extrapolated over 30 years.
- 4.4 The assumption of 4% traffic growth per year over 30 years is absurd: $1.04^{30} = 3.24$, meaning that this assumption predicts $3.24 \times 33,000 = 107,000$ vehicles per day on the R44 in 2044. That alone should prove that building your way out of trouble is simply not feasible in the long term. But in any case the constant 4% growth assumption itself is dependent on many unwarranted and unprovable underlying assumption e.g.
 - that people will continue to use family-owned vehicles at an occupancy rate of 1.77 persons,
 - that the economy will continue to grow at a rate which will support more and more vehicles on the road,
 - that the fuel price will remain constant rather than rising to a level which renders daily commuter journeys between Somerset West and Stellenbosch in low-occupancy vehicles economically unviable,
 - that no one will switch from cars to public transport,
 - that the percentage of people working from home via ADSL or such will remain the same,
 - that population growth will continue at the same percentage as in 2014, etc etc etc.

The specialist study itself shows that the Sensitivity Analysis in Section 6.4.3.4 shows that the economic benefit of GSRs shrinks to 0.6 if you take away the unwarranted 4% growth assumption.

- 4.5 The fact that an average 4% growth rate has been observed in the past is **not** a proof that it will continue in the future.
- 4.6 The absurditiy of the specialist study conclusions can be seen from the following viewpoint: the grade-separated roundabout (GSR) option will increase traffic and this in turn will increase the economic value of the GSR option. This is just a convoluted way of rephrasing what has long

been known, namely that increasing road capacity and increased traffic create a vicious circle, which in the present study is – absurdly – termed a good thing because of the increased BCR.

4.7 The traffic growth sensitivity analysis should have looked at a traffic **reduction** case also. Traffic **reduction** is the aim and solution when proper integrated transport is implemented. When public transport works, we shall not need the expensive roundabouts.