

EXPLORING THE CASE FOR A CENTRAL SUPPORT CENTRE FOR TRANSPORT PLANNING AND ANALYSIS IN SOUTH AFRICA

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ABSTRACT

Improving South Africa's land transport efficiency is critical to lowering transaction costs, improving accessibility for economic and social development and for the development of sustainable urban environments. Given the enormous planning challenge for authorities involved in planning and managing transport and the support needs from the private consulting sector, R&D establishments and academic institutions, which would seem to warrant a centralised planning support response. Internationally support centres for transport planning are thriving. This paper briefly sets down the need, possible role and functions of a Transport Analysis Support Centre for South Africa to improve the quality of planning and implementation across all sectors.

1. THE CHALLENGE FOR TRANSPORT PLANNING

Improving land transport efficiency is critical to lowering transaction costs, improving accessibility for economic and social development and for the development of sustainable urban environments.

In South Africa there are indeed many transport challenges. Sprawling low-density cities push up transport costs, and those least able to afford motorised travel find themselves displaced from centres of economic and social activity facing high transport costs. A growing dependence on low capacity road based transport increases urban congestion, whilst the quality of the road network has been deteriorating for years. Meanwhile, despite the growing recognition of the value of quality public transport systems, actually bringing about public transport integration and implementing network improvements represent an enormous task.

The planning challenges to bring about improvement for South Africa's land transport are highlighted by the following four facts:

- The demand for transport and observed **travel activity is a very complex derived demand**. Managing transport developments through policy guidance and implementation requires thorough analysis and accurate prediction skills.
- Government has put in place bold new legislation, in the NLTTA to restructure land transport. Now **policy and legislation have to be translated into successful improvement through high quality planning**, operations and local transport management
- There is a **skills and expertise gap** that is hampering the ability to develop effective, well-qualified transport plans based on thorough analysis upon which to guide restructuring and manage implementation.
- Internationally there are current advances in transport planning practice that are appropriate to South Africa in striving to better cater for the activity needs of the wide range of citizens. There is a **need to apply suitable worldwide best practice locally**.

2. TRANSPORT ANALYSIS AND MODELLING SUPPORT CENTRES

The transport challenges for South Africa are indeed great. But the country is not necessarily a special case from the standpoint that every country requires strong transport planning competency to best manage the transport impacts and promote sustainable transport futures. Many nations have formed units that we generically refer to here as *transport analysis support centres* to improve the quality of transport planning and modelling, which in turn promotes better policy and decision making.

Some international examples of transport analysis support centres:

Chile	SECTRA the Office for Transport Analysis
Netherlands	AVV, Advice Centre for Traffic and Transport
Sweden	SIKA, Swedish Institute for Communication Analysis
Switzerland	ARE, in support of national and regional transport policy making
UK	ITEA, The Integrated Transport Economics & Appraisal Division
USA	TMIP, the Travel Model Improvement Programme

There are many other similar programmes. Each centre differs somewhat in their general purpose and emphasis. All are mainly or wholly publicly financed. However, there are some common aims and objectives as listed below:

Common aims of transport analysis support centers:

- **Supporting Regional and National Policy Development**
A main function of some centres is to directly assist government with technical inputs and evaluation work in support of policy and to prepare government policy
- **Data and information sharing**
This is perhaps their most significant role. Land use, household, network and trip activity survey information, are typically available for free distribution. A common feature is the ease of information access using Internet sites usually organised into regions. The objective is to eliminate wasted time searching for information, enable officials and consultants ease of access for planning, and very importantly to ensure that the centre is the source of the most up to date and validated information for quality control purposes.
- **Best practice guides**
“How to do” guides on a range of transport planning and transport modelling challenges This ensures access to latest approaches and the statutory planning requirements, providing support to all ranging from academic inputs to reviews of successful field implementations.
- **Training in transport planning**
Varying from the role of communicating and coordinating training courses available to offering instruction in-house.
- **Specific support for transport modelling**
Given the costs and complexities of setting up and maintaining strategic transport models and specialist models, a support common centre for data manipulation validation, calibration. Some centres take on the role of custodian for regional models, retaining version control and model integrity.
- **Databank of relevant studies**
Sites and centres will often provide case study material on successful or poignant projects which illustrate good practice, providing insights into how to build on these achievements.

- **Clearing house function**

Direct question response, offering guidance, putting people in touch, providing technical support based on topic, etc.

3. THE CASE FOR A TRANSPORT ANALYSIS SUPPORT CENTRE (TASC) IN SOUTH AFRICA

There is strong evidence that a critical skills and capacity gap exists in the area of transport planning, analysis and modelling. This affects the role that government can play to effectively guide policy, planning and implementation. In the private sector it affects the ability of small and emerging firms to offer a comprehensive, quality service. Even in established consultancies, there is a gap in technical transport planning expertise and a lack of open debate and sharing. The consequences of this situation continuing will be in terms of policy that does not become implemented, of plans that are poorly developed and lack a thorough analytical case, in essence the transport improvements so desperately needed will not be forthcoming.

Clearly there is also the case for strengthening skills and capacity “in-house”, but given the common support functions of TASC, and the fact that nationally due to the skills gap, companies and institutions will be chasing the same scarce resources, a common support agency also has merit. In addition, the aspect of open access to information is vital for better planning, this is very much a central objective of the TASC.

Therefore, given the positive experience of other countries, and the planning and implementation challenges for transport restructuring in South Africa, there appears a strong case for the establishment of a South Africa Transport Analysis Support Centre (TASC) that supports both government and the private sector as well as R&D and educational institutions.

4. ROLE AND POSITIONING OF PROPOSED TASC

Figure 1 below illustrates the supportive links of a TASC, followed by an indication of the possible roles and functions for primary “end-users”:

Possible roles and support functions:

- **NDOT**
 - Strengthening departments analytical role by direct support to officials and programmes
 - Conducting analysis as direct input to transport policy development
 - Assisting policy roll out and implementation through analysis and modelling
 - Training role
- **Provincial, Metropolitan and Local Authorities**
 - Strengthening analytical role by direct support to authorities
 - Information sharing to aid planning functions
 - Optional agency function providing guidance for transport analysis and modelling, model specification, data validation, version control etc.
 - Training role
- **Universities and R&D Institutions**
 - Research opportunities through TASC, channel for improving state of practice also using international partners.
 - Sharing data, approaches and undertaking training for educational and research purposes
 - Secondments etc to work on joint initiatives with TASC.

- Private Sector
 - Free access to data and information resulting in better informed more robust analysis and consulting, eliminating the competitive advantage of “sitting” on information that belongs in the public domain.
 - Specific focus on supporting emerging companies through training and easy information access
 - Promoting greater awareness of the need and value for high quality transport planning, analysis and modelling, with spin-off of increase in private sector tenders and contracts
 - Access to base models where TASC performs agency role for local authority.
 - Secondments and opportunities to work with the TASC

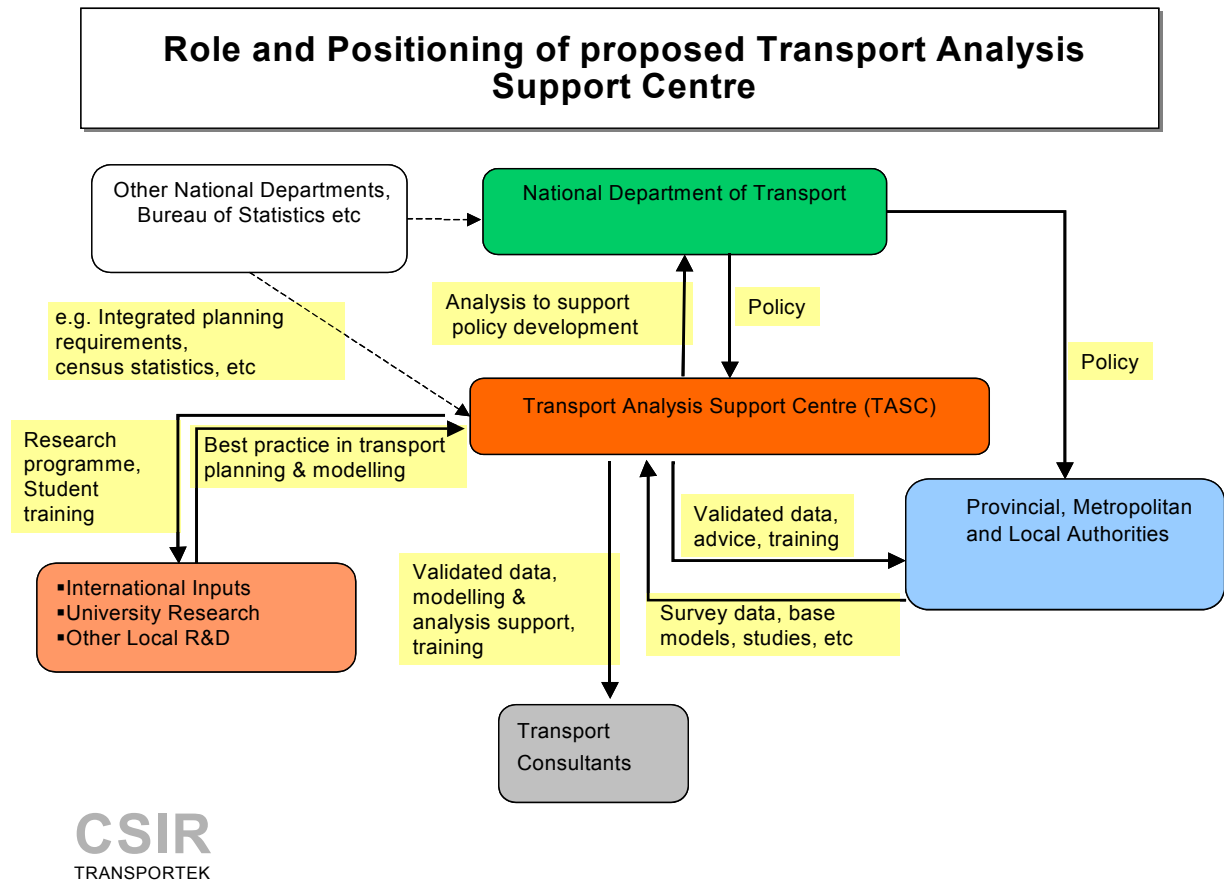


Figure 1.

5. ESTABLISHMENT PHASE OF TASC

A full specification phase is required as the first phase of implementation. This will incorporate an assessment of international examples mentioned, together with a fuller definition of the critical support requirements in the local environment. The functions of TASC will grow over time, and specification on immediate role to be performed being guided by the market need.

What is clear is that central government support will be critical for TASC to be effective at achieving its intended purpose.

Funding options are essentially:

- a) Agency directly supported by national government and “paid for” via savings through improved decision making etc,
- b) Self funded private initiative with training and bureau selling arm, or
- c) A combination of a) and b).

The international examples reviewed are fundamentally based on the former funding model. Relying on selling information and data at the same time as performing a role in the national interest does not seem to be compatible and the free exchange of information originally collected using public funds should be a central objective of TASC.

The urgent challenge therefore is to communicate the need for TASC and the markets response to this proposal to national government. The initiative falls in line with various national imperatives.

6. TASC: STRUCTURE AND ORGANISATION

A core team of transport technical, administrative, and information management personnel will comprise the permanent contingent of TASC. In addition significant cross-working with universities, institutions, the private sector and the public sector. For example core transport modelling skills will be sourced from outside (private / university / international etc) for specific tasks on development programmes. These resources will not be permanently appointed into TASC but contractually linked for the duration of the specific initiative. Similarly there should be looser arrangements to ensure that updates, for example in terms of state of practice, are not lost through overly rigid management within TASC. Therefore the need to support a virtual organisational structure is critical to TASC success. Again, further specification work will lean heavily on international organisational models.

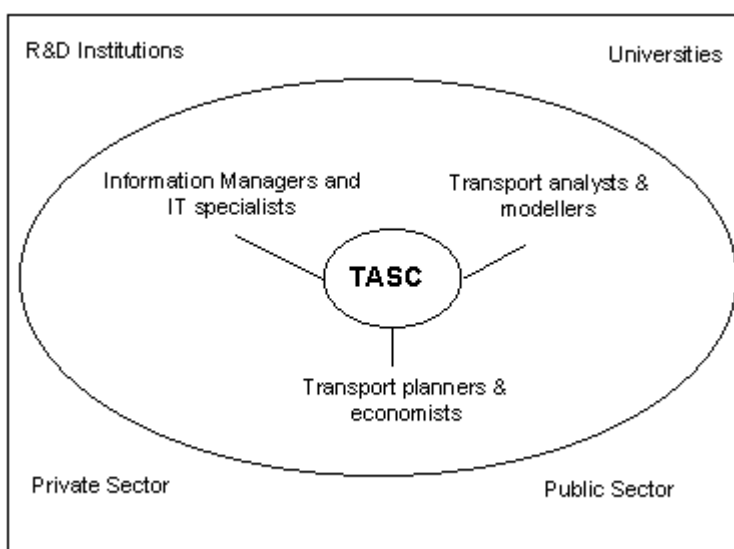


Figure 2.

TASC is not intended to reduce the importance of independent research, educational training or the role of private sector in contractual transport planning. Instead, as a support platform, firstly the objective is to raise the standard of planning, which will lead to more successful implementation. Hence freeing the current planning bottleneck will create a virtuous circle that will strengthen the hand of all players in the market. Those well positioned to take advantage of additional support in the industry will certainly not be losers.

7. MARKET FEEDBACK

A process of liaison to help specification of the role and functions of TASC is underway. We are currently seeking feedback from all members in the transport profession. The crucial next step is to get buy in from national government that this initiative has significant merit, and the support of the transport profession is key to achieving their buy-in.