

Message from the Editor

I recently completed my third module as part of the Transport Studies Course. This module focussed on local area transport planning, particularly on street and network design and creating spaces for more than just private vehicles. Streets should be seen as places for interaction within a community, for local businesses to develop and for mobility by all modes. This edition of the e-Tran:SIT focuses on new developments in street design as well as some thoughts on international trends. I'd like to thank Lisa Kane, Tran:SIT project mentor, for writing the article on the UK's "*Manual for Streets*."

Thanks for your continued support of the newsletter and we'll be back in the New Year with more hot topics and interesting thoughts as well as a revamped website, so look out for that.

Wishing you a restful and peaceful break over the next few weeks and travel safely.

Lize

The Manual for Streets – A new movement in Street Design Guest writer : Lisa Kane

In debates over urban street design the engineers tend to be typecast as the villains. Engineers have been labelled 'stuck', lacking creativity and inflexible. In truth engineers love nothing better than rigour, and there has been little in recent years to persuade them to change their practice.

With the publication in the UK of the 'Manual for Streets' and associated research results, practice overseas is starting to change. The Manual for Streets is significant to South Africa also, for a number of reasons. Firstly, it summarises new research into the relationship between street geometry, speed and road crashes. The new work shows how road narrowing and corner curb radii reduction reduces speeds and so improves road safety. It also highlights a role for reducing sightline distances in some cases, as a further way of reducing speed and so improving safety.

Secondly, it uses recent extensive work to create a new classification of roads, which includes multi-functional streets, such as South African 'main roads.' The new classification is multi-dimensional and considers the transport function of a link and also its role as a 'place' (a piece of urban public space in its own right). In practice this means that each class of road is subdivided according to how important it is as a 'place' for activities other than transport, such as shopping, socialising and leisure. This multi-functional approach integrates the concerns of urban designers and transport engineers into one classification framework.

Manual for Streets also adopts a new hierarchy of users, which places pedestrians at the top in residential street design. It also proposes a new design process, designed to cater for engineering concerns about risk when adopting new design approaches. In this new approach, auditing of the design process is used more consciously, as a way of enabling new creative methods, while retaining rigour. Manual for Streets tackles subjects which have been problems in South Africa as and so is well worth a read. It is available at <http://www.manualforstreets.org.uk>.

Lisa Kane is a transport planner, researcher and mentor to the Tran:SIT project. Her interests lie in urban transport and human development.



Street and Network Design in South Africa

Street and network design in South Africa has focussed primarily on meeting the needs of private vehicles, with limited safe access for pedestrians. These designs have been based on American concepts where assumptions include private vehicle dominance on roads and that non-motorised transport trips will be localised in nature.

The situation in South Africa does not match these assumptions, where public transport and non-motorised transport make up to 50% of the modal split in most cities. Although it is understood that pedestrians and cyclists need appropriate facilities in order to move safely, these interventions (in most cases retrofits) are done in a reactive and uncoordinated manner.

The hosting of the Soccer World Cup in 2010 has shown a drastic need to upgrade transport services in all South African cities. This provides a good opportunity to change the way network design takes place, with a focus on public and non-motorised transport first and then meeting the needs of private vehicles. We are already seeing some of this taking place, with an increase in the number of dedicated routes for road-based public transport, but facilities for non-motorised transport are still lagging behind.

Practical Tip

Shopping at the local shops rather than the large supermarket or mall means a decrease in your carbon footprint through decreased travel or a modal shift, as well as benefiting the local economy of your neighbourhood

Editor's Choice

The AutoBlog Green site, recently posted some video clips illustrating the concept of shared space, one showing an advertisement predicting future technology that can predict risks in travelling (we probably won't be seeing this for a long time) and the other shows an intersection in a Asian city, where motorcycles are very common. View both clips at www.autobloggreen.com under the "video banning stop lights will save gas" heading.

Naked Streets – integration of all road users

Shared space, also known as "naked streets", is a traffic engineering philosophy pioneered by the Dutch traffic engineer Hans Monderman. The approach relies on the principle that the users' behaviour is affected more by the street environment and design than by traditional traffic engineering measures such as speed bumps, traffic lights and pedestrian crossings.

Safety, congestion, economic vitality and community severance can be effectively tackled in streets and other public spaces if they are designed and managed to fully integrate road-based traffic with other human activities, and not separate the two. A major characteristic of a "naked street" is the absence of traditional road markings, signs, traffic signals and the definite distinction between "road" and "pavement". Drivers will need to be more aware of how they use the road space, because they are no longer the only user who is governed by traffic engineering measures.

A number of cities around the world have implemented schemes with elements based on the shared space principles, including Suffolk in the UK, Ejby in Denmark and Friesland in the Netherlands.



Eduardo A Vasconcellos

Eduardo A Vasconcellos, a civil engineer and sociologist based in Brazil who works and teaches as a transport planner, will be visiting Cape Town in February 2008 and will be sharing his knowledge of transport, environment and equity in developing countries. His book "Urban Transport, Environment and Equity: The case for developing countries", focuses on the unsatisfactory transport conditions in developing countries and the alternatives to these conditions. Visit the Tran:SIT website in the New Year for more information about his trip and the knowledge sharing opportunities taking place.

Sustainable Energy Africa (SEA)

Sustainable Energy Africa promotes sustainable energy approaches and practices through research, capacity building, information dissemination, project implementation, lobbying and networking. SEA manages the Urban TRAN:SIT Programme, which aims to build capacity in local government to develop more sustainable transport policy, strategy and implementation in South African cities.

If you would like to contribute to this newsletter or if you have any comments or questions, please contact us at lize@sustainable.org.za or call 021 702 3622 and ask for Lize Jennings.

