

Message from the Editor

This edition of the e-tran:SIT will be focussing on indicators and the use of data to assess and measurement sustainable transport in Cities. Indicators let us know how we are doing in our efforts, either planned or implemented, to achieve our goals. With sustainable transport, these goals often do not match up to traditional transport goals. Considerations around equity (the road belongs to everyone) and environmental impact seldom find their way into a new transport proposal or project. A usable and easily understandable set of indicators will go some way to integrating sustainable transport goals into future projects.

In international news, the election of a new Mayor for London, may impact on the future of the London Congestion Charge and the expansion thereof. Boris Johnson has declared safer public transport, including the assessment of the "bendy buses" as his top priority. He has however not been clear on the future of the London Congestion Charge. We will have to keep our eye on the news to see whether the proposed expansion of the system will take place and what this will mean for other systems that are being proposed around the world.

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Sustainable Transport Indicators Considerations for South African Cities

South Africa, as a fast developing country, is in the position to learn from the mistakes made by developed countries in the past in the management of transport. There is more awareness around the need for equity in the supply of services and use of the road space and the need to address the environmental impacts of the transport sector. These need to play a role in decisions around transport in South Africa.

There are a number of considerations that need to be taken into account in the South African context, particularly around the use of indicators and data to direct programmes and policies in South African cities. These considerations include:

- **How to address the sharing of road space by vehicles and pedestrians.** Walking makes up nearly $\frac{1}{4}$ of all trips to work in South Africa. Non-motorised transport (NMT) has to date been considered a lesser priority and accurate data at a city level is not easily available. In order to understand the transport picture, the modal split of NMT needs to be understood, as well as the average trip distance and the average trip time. In terms of NMT, it is also important to understand why walking or cycling is the mode of choice, whether it is a personal choice or because there is no other suitable alternative available. This can assist in identifying interventions around the placement of public transport systems or services that are closer to the origins of the NMT trips.
- **The local air pollution impact versus the global air pollution impact.** Internationally, the focus has been on mitigation of greenhouse gasses, the pollutants responsible for climate change. However in South African cities, the impact of local air pollution on human health and wellbeing needs to be taken into consideration. The lifespan of private vehicles is a lot longer than those in European cities. They also make use of old technology, which does not mitigate the impacts of pollutants. Cities need to measure air pollution in their cities, as well as the age of the vehicle fleet in order to use this data in their modelling exercises.
- **How to reduce the number of road accidents.** Pedestrians account for over 30% of all road accidents deaths in South Africa, and this has major social implications for the City, specifically if the pedestrian is the breadwinner for the family, which is often the case. An understanding of the pedestrian modal split as well as the accident hotspots in the city is key to addressing road accident deaths.
- **How to reduce energy use.** Transport typically accounts for 50% of energy consumption in a city. Private to public modal shifts and reduced trip distances and frequencies can bring about huge reductions in energy use.

Feedback from the CCT: Equity and Environment Workshop

Data and indicators are powerful tools in directing a city. Cape Town, through its vision in the Integrated Transport Plan, has highlighted the need for a sustainable transport system and thereby a more sustainable city in general. In order to achieve this vision they need to have a good understanding of what the status quo of transport in the city is. This is where indicators and data play a role.

In a workshop held with Eduardo Vasconcellos, a Brazilian transport planner and sociologist, the CCT transport staff used the data collected by the city on private, public and non motorised transport as well as services and infrastructure in order to determine the status quo of transport and how to use this data to assess projects in terms of equity and the environment. It was clear from this workshop that equity and environment indicators differ greatly from the traditional indicators that are used to assess transport projects, which generally focussed on financial and time savings for the user. If the City is to move towards its sustainable transport vision, the way in which projects are decided on will need to be modified.

Principles of Sustainable Transport Indicators

A set of sustainable transport indicators needs to include economic, social and environmental indicators in order to provide a balanced analysis (visit www.sustainable.org.za/transit for a list of sustainable transport issues that should be covered). The data should be feasible to collect and the indicators should be based on the data that can be collected by the City. The indicators should be in a form that is understood by all levels of society, including the general public and decision-makers amongst others. This is particularly important as the indicators are being used as a key assessment tool to direct policies, strategies and programmes. The type of data collected will depend on the type of analysis that is taking place. It is also suggested that targets are allocated to the indicators in order to clearly evaluate the progress. Consistency of the units to measure indicators also means that it is easier to compare data with previous years or assessments.

Although the principles above can direct a City in identifying sustainable transport indicators, the indicators need to be developed with the environment of the city in mind. The indicators need to be specific to City in terms of demographics, transport choices and splits and geographic location. All these will influence the transport choices, planning and management for the City.

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.

Practical Tip

The petrol price is continuing to rise and hitting our pockets harder every month. In order to identify ways in which to save petrol, keep a fuel log for one month, keeping track of each trip's distance and the reason for the trip. You'll probably be able to identify a couple of unnecessary trips.

Editor's Choice

In the October 2007 edition of e-Tran:SIT I discussed "green cars", vehicles that run on fuels that are not oil based, such as electricity, and hydrogen fuel cells. The following link shows another alternative that can be added to the list, namely the compressed air car

<http://www.youtube.com/watch?v=QmcpGZv0YT4>

The vehicle is powered by the Compressed Air Engine (CAE) developed by Motor Development International (MDI), a 15-year old company based in Nice, France, and headed by inventor and Formula One race car engineer, Guy Negre. For more information, visit

<http://zeropollutionmotors.us/> and

<http://www.gizmag.com/compressed-air-car-set-for-us-launch-in-2010/8896/>

Upcoming Events

The 27th Annual Southern African Transport Conference (SATC) 2008 will take place from 7 – 10 July 2008 at the CSIR International Convention Centre in Pretoria. The theme for the conference is "Partnership for Research and Progress in Transportation. For more information visit www.up.ac.za/academic/civil/satc.html

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.

