

Public transport prioritised



The transformation of the City of Johannesburg's public-transport landscape, with the development of the Rea Vaya BRT system, is not only raising South Africa to international par but also providing immense and valuable opportunities within the construction and facilities-management/service-provision realms.

The City of Johannesburg's Department of Transport has developed a transport plan, as part of the city's Integrated Development Plan (IDP), which serves as the official blueprint for service delivery. It focuses on public transport, private transport, policies and institutions.

Public transport was prioritised in the Strategic Public Transport Network (SPTN) plan which comprises a route network of 330 km. Implementation commencement was approved by the municipality, the Gauteng MEC and the national Minister of Transport in 2003.

The IDP is updated every year with major updates scheduled every five years.

In 2006, Johannesburg's Department of Transport decided that the SPTN, in its then planned format, did not prioritise public transport sufficiently.

Following investigation and research into international best practice, the city decided to divert the kerbside bus lane-focused, or SPTN, network to a median-side bus lane-focused bus rapid transit (BRT) system

which has been implemented successfully in many developing countries with similar challenges to South Africa.

The BRT system saw its mainstream origination in Brazil's Curitiba. This city's public-transport system comprises buses only. The concept has since expanded across the world with current best practice observed in Bogotá, Colombia. Six of these systems are being built in India.

The BRT methodology is exceedingly appropriate for developing countries where the focus is on road-based transport. There are tremendous opportunities for the implementation of this alternative system while not excluding but incorporating existing systems and public-transport practices.

The SPTN's germination process and goals have been maintained but the actual method of implementation was transformed. In November 2006, the council approved the first phase of the revised 330 km plan as the first building block of the greater network and, in October 2007, the implementation plans of the two first steps, phases 1A and 1B, were approved.

The timelines for the roll-out of the BRT were as follows:

- 2008: Ellis Park Precinct, Soweto Highway and Main Reef Road.
- 2008/2009: Construction within the inner city and Ellis Park Precinct, and along the Soweto Highway, along Main

Reef Road, past the hospitals and university into Jan Smuts Avenue.

- 2009: Completion of Phase 1A in time for the Confederations Cup – this section comprises 40 km and 48 stations.
- 2010: Completion of Phase 1B in time for the FIFA World Cup – this section comprises 86 km and 102 stations.
- 2013: Conclusion of the implementation of Phase 1.

It included construction of 122 km and 158 stations managed by the JDA with exclusive median bus lanes, separate closed-median stations (approximately 500 m apart), trunk routes using articulated buses, and complementary and feeder routes using smaller buses. A novel feature is the inclusion of inner-city circular routes which provide an efficient crisscrossing system in Braamfontein and Newtown. The international model for BRT stations is being applied in line with a South African aesthetic which the city calls the "porcupine" design. The stations are built on the median islands with a raised floor-level height of 940 mm (the same level as the bus floor). When operating, the doors of the bus and station open simultaneously. The stations, being modular, are being built off site to allow for rapid *in-situ* assembly. Overhead pedestrian bridges or subways will be built at certain stations. Other stations will be positioned alongside existing pedestrian crossings and intersections.