THINK GLOBAL, ACT LOCAL

TRANSPORT ACCESSIBLE FOR USERS

Transport users are reliant on a safe, efficient and accessible transport system that accommodates all users; those on foot, cycling, using public transport, traveling in private cars, freight and those who have special needs.

Universal Accessibility

According to the United Nations Convention on the Rights of People with Disabilities universal design is an approach to create an environment that meets the needs of all potential users to the greatest extent possible.

Taking into consideration the diverse abilities of individuals, such as agility, balance, cognition, coordination, endurance, flexibility, hearing, problem solving, sensory processing capacity, strength, vision, and walking speed; it emphasises inclusive design that ensures participation and access for all.

Inclusive design ensures that those users that have special needs can safely navigate the transport system.

Typically such users include people with a disability, the aged, pregnant women, those that are limited in their movement by children.

Special attention must be paid along the entire trip chain to ensure that the built environment and public transport systems comply with this.

Due consideration must be given to the sidewalk design, dropped kerbs, pedestrian crossing design, cycle facilities, location of urban street furniture, maneuverability of people using wheelchairs, tactile paving and pedestrian push-buttons.

Ramps, stations and public transport vehicles should be universally accessible. Elements to consider include counter heights, turnstiles and wayfinding information.

Non-motorised transport

Non-motorised transport (NMT) includes all forms of movement that do not rely on an engine or motor for movement. This includes walking, cycling, rickshaws, animal-drawn carts (especially in rural areas) and rollerblading or skating for recreational purposes. Ultimately, NMT grows liveable communities - it is the most basic part of the transportation system and pedestrians in particular contribute to the vibrancy of a community.

In addition, there has been a global trend towards sustainable development and to sensitise communities to the role that all people can play in ensuring future sustainability and a healthy environment for future generations.

Why is there such a big focus on NMT? Stakeholders have realised that that NMT is an integral part of the transport system and includes pedestrians and public transport users. Even those that use private transport are on foot for a portion of their journey; either at the start or at the end. NMT is also so much more that cycling.

The use of animal drawn carts and wheelbarrows are essential forms of transport in rural areas and support local economic activities. Through the provision of sidewalks and safe crossing facilities, liveable and safer communities can be created.

In designing the built environment around us due consideration must be given to NMT users; those on foot, cycling, using animal-drawn carts and others forms of NMT.

ITS has developed a sound understanding of the NMT context in both urban and rural South Africa through their involvement of the drafting of a range of NMT, public transport and integrated transport plans, policies and strategies for various areas, as well as the design of roads, intersections and bicycle routes.

Non-motorised transport

Typical matters to be addressed include the following: Are sidewalks wide enough? Are they continuous and add to the overall network? The location of urban street furniture and the geometric design for cycling requires special attention. Safer road design is also of paramount importance.

We have been involved in NMT across South Africa and in the SADC region through our involvement in the following projects:

- NMT Plan for City of Cape Town - Strategy and Policy Development
- Update of Bicycle masterplan for Cape Town
- Development of a NMT Plan for the City of Cape Town's Conceptual Operations Plan for the Integrated Transport Network (IRT)
- Development of an NMT plan as part of the Operational Planning and Conceptual design for Integrated Transit Project in Polokwane -
- NMT Plan for the City of Cape Town Integrated Public Transport Network IPTN and Wetton Lansdown Corridor
- Development of a guideline for Pedestrian & Public Transport Facilities on national roads in South Africa
- Development of a Roads Policy for South Africa
- Update of the NMT Policy for South Africa
- Universal access specialist for the design of Corridor C1B, a BRT corridor, in Durban, South Africa

TRANSPORT ACCESSIBLE FOR USERS

Public Transport / BRT

Since the original BRT concept was formulated and applied in the South African context, the focus has shifted significantly in terms of the need to provide more cost effective solutions, applicable to the local environment and within the constrained budgets. ITS team has good experience in all aspects of BRT and public transport planning including:

- Route planning including trunk, feeder and more direct or express routing
- Locating stations, stops and depots as well as transfer locations
- Travel demand surveys and forecasting demand through modelling
- Fleet sizing and vehicle specifications
- Intelligent Transport Systems including Automated Public Transport Management Systems
- Preparing operating cost models, cost estimates and fares
- Non-motorised Transport and Universal Accessibility
- Control Centre Design
- Traffic Modelling and Impact Assessment

The team has significant experience within these infrastructure planning components. More recent projects with respect to BRT planning include the following:

- Cape Town MiCiti
  BRT station concept designs, environmental impact, economic impact and ITS (2008-2010)
  BRT final station design and implementation (2011-2013)
- eThekwini IRPTN
  Project Management, Conceptual, Preliminary, Detailed Design, Preparation of Contract Document and site supervision for the Ethekwini IRPTN Phase 1, Route C1B: Inanda Road Across Umgeni River along Felix Dlamini Road to Centrum Site (2014 – 2015)
- Polokwane
  Operational Planning and Conceptual design for Integrated Transit System Project (2013-2015)
- Tshwane BRT
  A centralised traffic control centre which was designed to centralise communication and provide coordinated, effective and efficient service delivery. Included in the project was geometric and traffic signal upgrades, ITS and project management (2012-2015)

Our experience and expertise includes an

- Understanding of urban and rural public transport systems which include public transport planning projects in rural parts of the Cape Winelands and the Central Karoo in the Western Cape.
- Working knowledge of the relevant transport planning legislation and its implications for public transport planning and delivery at municipalities.
- Sound data collection and survey methodologies
- Extension knowledge of public transport, integrated transport planning and non-motorised transport planning and has undertaken a number of Integrated Transport Plans and Public Transport Operations Plans for various municipalities, including metros across South Africa.

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