

Traffic Engineering



GIBB provides a specialised service by highly experienced staff in Traffic Engineering. Increased mobility, economic growth and higher levels of car ownership impose increasing demands on the transportation systems of the African continent. Management and development of transport systems are aimed at improved mobility, increased efficiency, reduced cost, greater emphasis on traffic safety and proper management of the impact on the environment.

Traffic studies

- Traffic and pedestrian counts, and information systems
- Origin - destination surveys, questionnaires, interviews and parking and loading surveys
- Speed studies and recommended speed limits
- traffic impact studies including major shopping centres, offices, hospitals, filling stations, industrial and commercial areas, and mixed-use developments.

Traffic safety

- Road safety audits and safety at school zones
- Identification and improvement of high accident frequency locations
- Traffic safety management and education



Capacity analysis of intersections and networks

- Highway capacity manual HCM and SIDRA intersection analysis
- SIMTRA and TRARR simulation models

Pedestrian planning and modelling

- Virtual reality technology
- PAM - Pedestrian flow model
- PEDROUTE - Detailed station platform simulation
- ARRIVE and DEPART - Model arrival, departure and transfer of passengers and baggage at airports and international stations.

Traffic management

- Access management policies and plans
- Planning and design of activity corridors
- Traffic calming and local area traffic management



Traffic signal systems

- Signal design and implementation
- Area traffic control and co-ordination