Safer by design in African cities

Chris Kost
Nairobi: Conversion of arterial streets to highways

Speed limit = 110 km/h
Existing street design guidelines in Kenya

- Drafted in 2001, not formally adopted
- Minimum footpath width:
  - 0 m on trunk roads in urban areas
  - 1.25 m on other roads
- Cycles “can mix safely with vehicles at speeds up to 65 km/hr”
- Operating speeds:
  - Local street: 20-40 km/h
  - Collector street: 30-70 km/h
  - Arterial streets: 40-90 km/h
New street design guidelines: Speed management

**Street typology**

- **Local streets with shared space.** At speeds of up to 15 km/h, motor vehicles, pedestrians, and cyclists can safely mix. Traffic calming is needed to minimise vehicle speeds.

- **Local and collector streets.** Streets with speeds of 30 km/h require separate footpaths. With traffic calming, cyclists can share the carriageway with mixed traffic.

- **Arterial streets.** Streets with speed limits of 40-50 km/h require physically separated cycle tracks and footpaths. Traffic calming or signalisation is required at pedestrian crossings.
Kenyatta Highway, Kisumu

- Nearby land uses:
  - 10 primary and secondary schools
  - 6 major health facilities
  - Major markets, churches, meeting halls
- World Bank-financed widening project
- All footbridges replaced with at-grade crossings & traffic calming
Kisumu Triangle project: Existing
Kisumu Triangle project: Proposed
DART BRT, Dar es Salaam: 6.5 m carriageway
Addis Ababa B2 BRT

Tabletop crossings

Intersection turning radii
Addis Ababa B2 BRT
Obrigado