# Session 3.4 Planning for road safety

**Conducting Road Safety Audits & Appraisals**

**Presented by: RTS & AGTT**

January 2022

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# Planning road safety at macro scale

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## Importance of systems wide planning

- Road safety in context
  - Land use planning and road safety
  - Road hierarchy and road safety
  - Access management and road safety
  - Planning for NMT for road safety

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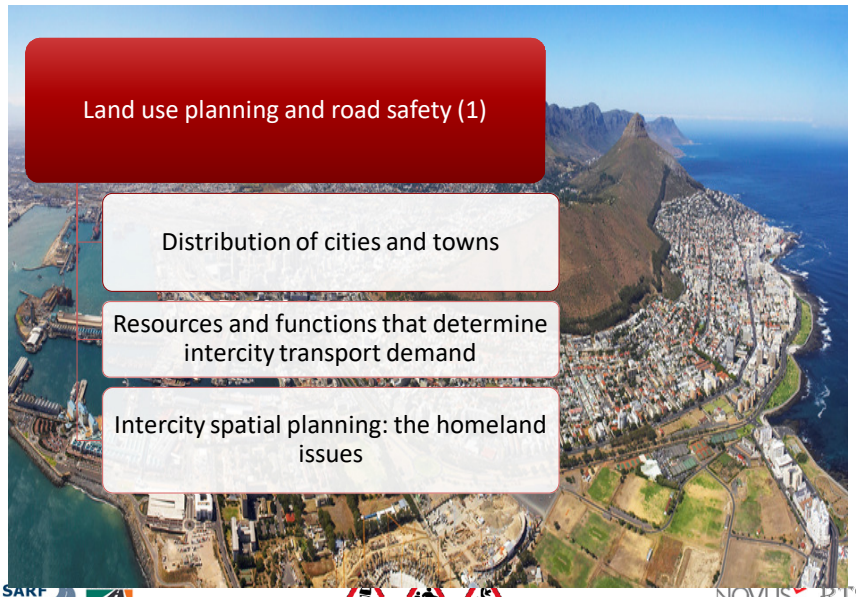
## Importance of systems wide planning



- Land use planning and road safety (1)
  - Distribution of cities and towns
  - Resources and functions that determine intercity transport demand
  - Intercity spatial planning: the homeland issues

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## Importance of systems wide planning

### Land use planning and road safety (2)

- Distribution of employment and residential zones
- Resources and functions that determine intracity transport demand
- Intracity spatial planning: the apartheid city

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## LAND USE PLANNING AND ROAD SAFETY

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## ROAD HIERARCHY AND ROAD SAFETY

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## Spatial and Land use planning

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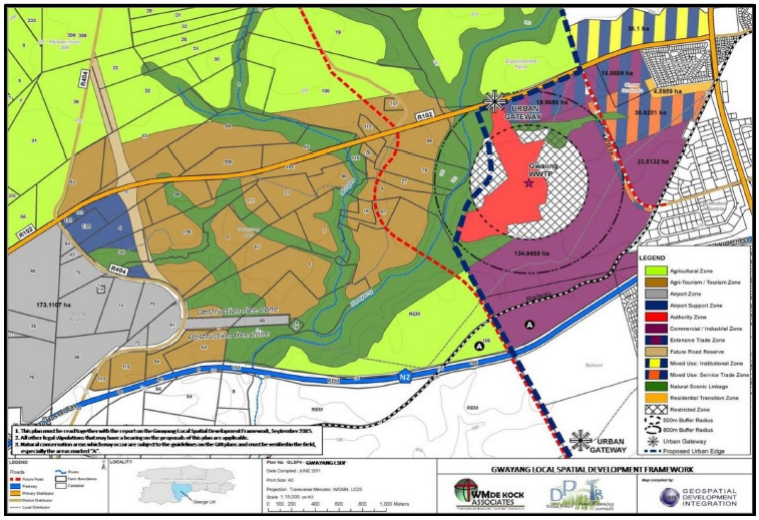


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# ACCESS MANAGEMENT AND ROAD SAFETY

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## Road classification

TRH 26

South African
Road Classification and
Access Management Manual

Version 1.0
August 2012

Committee of Transport Officials

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RELATIONSHIP OF FUNCTIONALLY CLASSIFIED SYSTEMS IN SERVING TRAFFIC MOBILITY AND LAND ACCESS

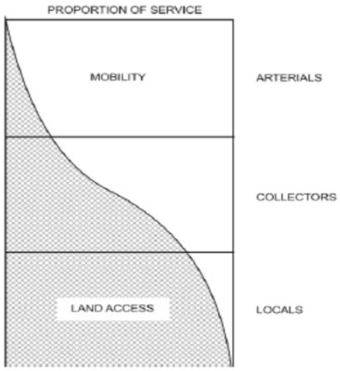


Figure 2 Highway Functional Classification (AASHO, 1964)

TRH 26 South African Road Classification and Access Management Manual

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Road Classification and Access Management

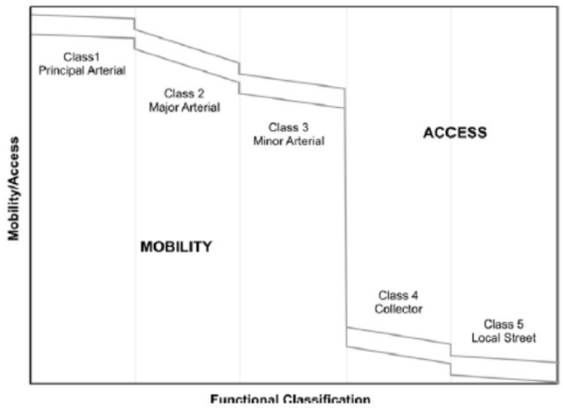


Figure 6 Road Functional Classification adopted for this Manual

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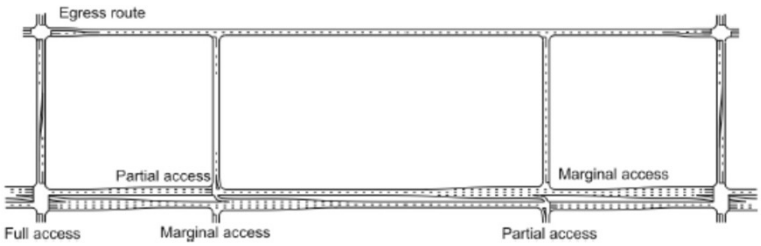


**Figure 8 Partial and Marginal Access Options**

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## NMT AND ROAD SAFETY

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## Universal Access

Convention on the Rights of Persons with Disabilities (CRPD).

Committed to ensuring that development activities are inclusive of, and accessible to, people with disability.

CRPD's definition of 'universal design', meaning that the design of products, environments, programs and services are to be usable by all people, to the greatest extent possible,

without the need for adaptation or specialised design.

Universal design does not exclude assistive devices for particular groups of people with disability where this is needed.

Australian Government, n.d., Accessibility Design Guide: Universal design principles for Australia's aid program

A Companion Volume to Development for All: Towards a disability-inclusive Australian aid program 2009-2014

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## Universal access

While the concept of universal design emerged primarily with people with disability in mind, universal design helps everyone with support and assistance needs including the elderly, pregnant women, children and people with a temporary illness or injury. Thus the benefits of implementing universal design are wide.

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## Seven universal design principles

Principle 1: Equitable use
Design that is useful and marketable to persons with diverse abilities.
Principle 2: Flexibility in use
Design that accommodates a wide range of individual preferences and abilities.
Principle 3: Simple and intuitive use
Design that is easy to understand, regardless of the user's experience, knowledge, language skills, or concentration level.
Principle 4: Perceptible information
Design that communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
Principle 5: Tolerance for error
Design that minimises hazards and the adverse consequences of accidental or unintended actions.
Principle 6: Low physical effort
Design that can be used efficiently and comfortably and with a minimum of fatigue.
Principle 7: Size and space for approach and use
Design that provides appropriate size and space—for approach, reach, manipulation, and use, regardless of the user's body size, posture or mobility.

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## Barriers to universal access

- physical and/or environmental accessibility—removing barriers
- communication accessibility—providing accessible formats in alternative modes and means of communication
- intellectual accessibility—providing reading formats and speaking in a way that is accessible to people with intellectual and/or learning disability
- social and/or attitudinal accessibility—removing stigma and other negative behaviour against people with
- disability and their families and carers
- economic accessibility (also referred to as 'affordability')—establishing this as a core requirement of a person's social and economic rights.

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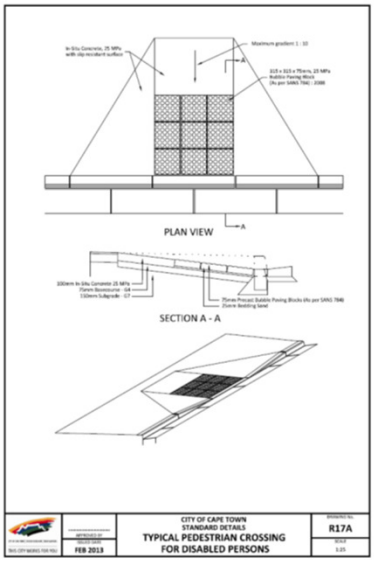


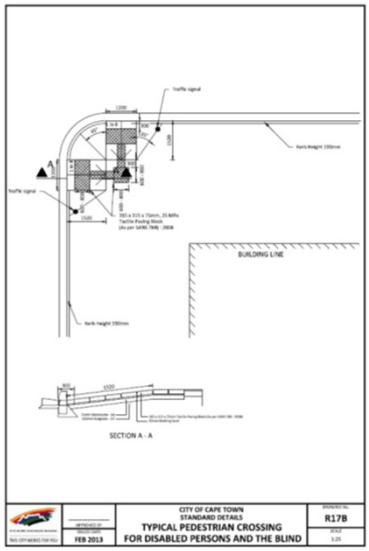


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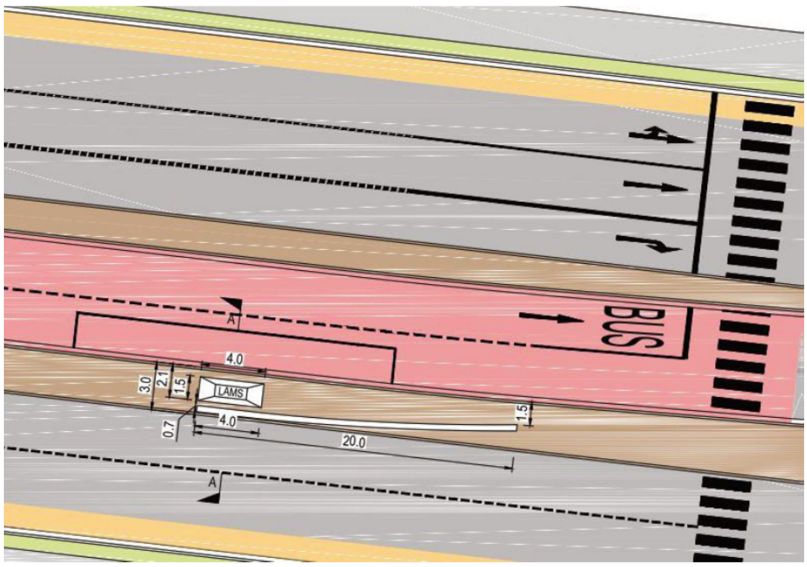


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END OF LECTURE

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