LECTURE A9 – SIGNS AND MARKINGS

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GENERAL

Any signs, signals, markings and devices placed on or adjacent to a street or highway to regulate, warn, guide or inform traffic can be described by the term 'traffic control devices'. Hence in the USA, they have a MUTCD; Southern Africa has the Southern African Development Community Road Traffic Signs Manual (SADC RTSM).

Any traffic control device should meet the following elementary requirements

It should be capable of fulfilling an important need

It should command attention

It should convey a clear, simple meaning

GENERAL

It should command the respect of road users

It should be located to give adequate time for response

It must be sanctioned by law if it controls or regulates traffic

The last of these needs special mention in that if signs or markings are to control or regulate in terms of Law, then the legal requirements for the size, shape, colours and positioning of the signs or markings needs to be strictly in accordance with the legal requirements for them to be enforceable.

PURPOSES

Traffic control devices provide essential visual guidance and instructions to the motorist. They should, however, only be used where warranted by facts and field studies. Also, they are easily damaged or defaced and become dirty. An adequate maintenance programme must be established if signs are to retain their authority as traffic control devices.

Regulation of Traffic

Regulatory devices are used in order that the motorist can be,

PURPOSES

Informed of regulations that are in force - these include speed limits, parking restrictions, one-way operation, no overtaking and load limits

Instructed to take some action - stop, yield, right lane must turn right

Prohibited from making certain maneuvers - turn prohibitions, no entry, road closed

Assigned right of way - traffic signals, channelisation

PURPOSES

Warnings to Traffic

Warning devices are used to,

Indicate the presence of geometric features with potential hazards - curves, intersections, gradients

Define major changes in roadway character - road narrows, single lane road, divided highway ends, surfaced pavement ends

Mark obstructions or other physical hazards in or near the roadway - uneven surface, concealed entrance, low headroom

PURPOSES

Locate areas where hazards may exist under certain conditions - schools, falling rocks, slippery when wet, railroad crossing

Inform motorists of regulatory control ahead - traffic signal ahead, stop ahead

Advise drivers of appropriate action - advisory speed signs, traffic signal progression speed sign, merging traffic

Guidance

Guide signs are used to provide,

PURPOSES

Route identification - highway route number markers, street name signs, detours

Directions to travelers - destination and distance signs, intersection and interchange signing

Delineation of the roadway - delineators, pavement edge markings

Information - rest areas, services signs, parking area signs, hospital signs, city boundary signs and other political boundaries, stream names, elevations, landmarks, scenic views

PURPOSES

As a point of interest, can anybody explain what the number at the top of this freeway exit sign is?

UNIFORMITY

Uniformity of Design

This aids the motorist in instant recognition and comprehension. Traffic sign design includes shape, colour, size, symbol, wording, letter style, illumination and reflectorisation. Non-standard signs provide excuses for violations and cannot be enforced.

Uniformity of Meaning

This aids the motorist in complying with the regulations. Most traffic signs have at least general uniformity of meaning, but local driver behaviour and enforcement practices may distort this meaning.

UNIFORMITY

Uniformity of Application

This promotes driver observance and avoids excessive or unwarranted use of traffic signs. Such uniformity ensures that similar conditions are controlled by the same type of sign. Unfortunately, signs can be installed under political or public pressure at locations where they are not warranted. These signs lead to driver apathy and disrespect for such types of control

UNIFORMITY

Uniformity of Location

This reduces the possibility of the motorist not seeing a sign. Standard sign locations may assist the driver in determining where the directed action is to take place, eg position to stop at STOP signs and traffic signals, location of ramps with respect to freeway direction signing. Uniform location cannot always be achieved in practice. In such instances, the general rule is to install the sign as near to the standard location as possible, ensuring that it is placed where the motorist or pedestrian can be expected to see it in his normal line of vision.

UNIFORMITY

Importance of Uniformity

The need for uniformity in traffic signing is becoming more and more important as the use of vehicles increases.

Present day driving conditions including high speeds, complex intersections and interchanges, increased volumes and roadside distractions, require signage that a driver can see, recognise and understand quickly. The driver must have time to make his decision and take appropriate action safely, thereby reducing the necessity for last-minute, hazardous maneuvers

UNIFORMITY

Increased travel has resulted in more inter-city and inter-provincial trips. Uniform signage reduces motorist confusion when driving in an unfamiliar area

Traffic engineering operations are simplified through economy in manufacture, installation, maintenance and administration of traffic signs

NATIONAL UNIFORMITY

In order that drivers are familiar with and understand road signs and markings throughout the country, and in this case the countries surrounding South Africa who form part of the Southern African Development Community, it is vital that they are consistent and uniform in their application.

This is achieved in Southern Africa by the use of the SADC Road Traffic Signs Manual (SADC-RTSM)