WESTERN AUSTRALIAN ROAD HIERARCHY

Background
Main Roads Western Australia (Main Roads), in co-operation with local government, manage Western Australia’s road network.

Roads vary considerably in their role across the State. The roles include providing for:

• efficient mobility on high volume, fast moving urban and rural roads such as highways;
• low traffic volume, pedestrian and cyclist friendly access throughout residential areas;
• linkages between towns in rural areas; and
• access to properties in agricultural and remote pastoral areas.

The ability of roads to perform their role can be improved significantly by using suitable traffic management treatments. Obviously traffic calming devices are not appropriate on a freeway and interchanges are not appropriate for residential streets or minor rural roads. It is therefore important that the right category be allocated to all roads to ensure relevant traffic management treatments are provided.

To promote effective and efficient traffic management, Main Roads, in consultation with local governments in the early 1990s, developed a Road Hierarchy to designate the role of all roads and to encourage uniform traffic management of roads of the same type. The hierarchy was based on the “separate functions” principle set out in the (then) State Planning Commission’s policy statement on road classification for urban planning purposes. The Hierarchy system was subsequently extended to cover all roads in Western Australia, with an additional category created to accommodate important distributor type roads in rural areas.

The Western Australian Road Hierarchy covers approximately 149 000 kilometres of State and local government roads. A total of 139 local governments manage some 131 000 kilometres of that network.

Main Roads directly manages approximately 18 000 kilometres of roads. These are ‘freeways’, ‘highways’ and ‘main roads’, collectively known as State Roads, and are designated as “Primary Distributor” roads in the hierarchy. All have a similar role, to provide for the efficient mobility of people and goods. They carry relatively high traffic volumes of fast moving traffic to meet the primary road transport needs of the State.

Hierarchy Categories
The Road Hierarchy consists of six types of roads:

• Primary Distributor; (built up and rural areas)
• Regional Distributor; (rural areas)
• District Distributor A; (built up areas)
• District Distributor B; (built up areas)
• Local Distributor; (built up and rural areas)
• Access Road. (built up and rural areas)

Note: The classification of “Primary Distributor” is reserved for State Roads.

Road Types
Road Hierarchy types are briefly described below. Specific criteria for each category is provided in the Road Hierarchy Table link.

Primary Distributor:
Provide for major regional and inter-regional traffic movement and carry large volumes of generally fast moving traffic. Some are strategic freight routes and all are State Roads. They are managed by Main Roads Western Australia.
Regional Distributor:
Roads that are not Primary Distributors, but which link significant destinations and are designed for efficient movement of people and goods within and beyond regional areas. They are managed by local government.

District Distributors:
District Distributor A and B roads run between built up area land-use cells and generally not through them, forming a grid which would ideally space them about 1.5 kilometres apart. They are managed by local government.

District Distributor A:
Carry traffic between industrial, commercial and residential areas and generally connect to Primary Distributors. These are likely to be truck routes and provide only limited access to adjoining property.

District Distributor B:
Perform a similar function to type A District Distributors, but with reduced capacity due to flow restrictions caused by frequent property accesses and roadside parking in many instances. These are often older roads with a traffic demand in excess of that originally intended.

Local Distributor:
Local Distributor roads are managed by local government. Their role is similar in both built up areas and rural areas, but traffic volumes and thus traffic management requirements differ significantly:

- **Built Up Area**
  Roads that carry traffic within a cell and link District Distributors or Primary Distributors at the boundary, to access roads. The route of Local Distributors should discourage through traffic so that the cell formed by the grid of higher order distributor roads, only carries traffic belonging to, or serving the area. Local Distributors should accommodate buses, but discourage trucks.

- **Rural**
  Connect to other Rural Distributors and to Rural Access Roads. They are not Regional Distributors, but are designed for the efficient movement of people and goods within regional areas.

Access Road:
Provide access to abutting properties with safety aspects having priority over the vehicle movement function. In urban areas, these roads are bicycle and pedestrian friendly, with aesthetics and amenity also important. Access Roads are managed by local government.

Further Information
Further information about the Western Australian Road Hierarchy can be obtained by contacting Main Roads’ Road Classification Manager on ph 138 138 or enquiries@mainroads.wa.gov.au.