

Roads Hierarchy Assessment Factors

All road sections in Shetland will be allocated a total score based on an assessment of nine attributes. These scores will determine the maintenance classification i.e. M1 to M5) applied to the section of road.

This scoring matrix has been developed from a similar model used in another Scottish Authority. Once sections have all been evaluated it may be necessary to fine-tune the scoring matrix to eradicate anomalous results. The advantage of having maintenance standards determined by hierarchy rather than road class is that the system is totally within the control of the Council and roads can be upgraded or downgraded to suit changing usage patterns following development etc.

1. Traffic Flow

The amount of traffic carried by a road is a key factor in the amount of damage it sustains. Roads carrying more than 4000 movements are allocated 15 points whilst those carrying less than 500 movements receive 3 points.

2. Bus Usage

The number of bus services and movements along a road section is an attribute, which signifies its importance to the community. Problems requiring traffic controls on sections utilised by many buses will have a more significant impact than equivalent operations on sections used less extensively by buses. Points are awarded on the basis of numbers of bus services as well as bus movements per day. As an example a road section serving a single scheduled bus services with up to 10 movements per day is allocated 4 points.

3. Main or only link

Many of Shetland's roads are spur roads, which form the only means of access to the communities served. This attribute only applies to settlements containing twenty properties or more. Such roads limit the opportunity for diversions when essential work is needed and this attribute attracts a rating of three points.

4. Road Class

The public expect that more major routes will receive a higher priority for treatment than minor roads. This attribute attracts a rating ranging from 8 points for an A class road to two points for an unclassified road.

5. Road Function

As Road Class is not a totally reliable indicator of importance, roads have also been assessed on their function within the network.

Strategic routes are allocated five points whilst local access roads receive one point.

6. Winter Hierarchy

Each road section is assigned a certain hierarchy under the winter maintenance programme. These have been developed over the years taking into account traffic flows, strategic importance, bus routes, care homes, doctor's surgeries, schools etc. Priority 1 routes attract three points whilst priority 3 attracts one point

7. Local Importance

An additional set of local importance factors were considered for each section.

- The presence of a medical facility or an A & E department would add up to three points,
- The presence of a police, ambulance or fire facility would add three points,
- Main industrial/commercial installations would attract a further two points and four points for a major industrial complex,
- The presence of a school or college would attract a further two points
- The presence of a bus station, inter-island ferry or air terminal would attract up to three points and a main port / ferry terminal or airport would score 4 points.,
- Access to an isolated settlement will also attract one point.

8. Promoted routes

Our main tourist routes are also allocated one point.

9. HGV Usage

In recognition of the fact that some of our more rural road sections are used by articulated vehicles making regular deliveries to fish farms etc. we have allocated a score of two points to any section of road used on a regular, weekly basis by articulated vehicles.