

Carriageway Condition Surveys

1. The Council carries out regular surveys of the condition of the county's road network. The surveys help monitor conditions and inform treatment decisions to keep the network safe. The surveys are carried out to standards set by the Highways Agency and by the relevant Codes of Practice.

2. Surveys using vehicle mounted laser equipment (known as Scanner surveys) are carried out to assess road conditions on the classified road network (A, B and C class roads). The frequencies of the Scanner surveys on the network are:

Principal Roads – 50% in both directions per annum

B Roads – 100% in one direction per annum alternating direction

C Roads – 50% in one direction per annum alternating direction

3. The survey information divides the network into sections and grades their condition into three categories:

Red - Lengths of road in poor overall condition which are likely to require planned maintenance soon.

Amber - Lengths of road where some deterioration is apparent, which should be investigated to determine the optimum time for planned maintenance treatment.

Green - Lengths of road where the carriageway is generally in a good state of repair.

This information helps to identify those areas of road where treatment is required, and where it is likely to be needed in the future.

4. On unclassified minor roads which are generally unsuitable for scanner surveys the road is visually inspected by a Coarse Visual Inspection (CVI), which grades the condition of the roads. These are carried out on 25% of the network annually.

5. On Principal Roads there are Deflectograph surveys carried out to test the structural strength of the carriageway. These are carried out on 20% of the Principal Road network per annum. Specific surveys can be carried on sections of road identified to require maintenance to provide data for maintenance design purposes.

6. A major factor in improving road safety is to ensure the highway network has adequate skid resistance, and a programme of specialist testing is carried out annually on the main routes in order to identify potential problem sites. These sites are then prioritised according to risk and road safety considerations in accordance with the county's Skid Resistance Policy. The surveys are carried out annually on the Group 1 roads in both directions.

7. This information, together with accident data and local knowledge, is used to inform the selection of roads to be treated in the annual works programme. The surveys enable the maintenance requirements to be identified, and the costs of the necessary work to be estimated.
8. There are various processes and treatments used to maintain the network, including surface dressing, surfacing with various materials, major schemes to reconstruct carriageways, drainage improvements, renewed road markings and other works to address safety issues. The type of treatment applied, and its cost, depends on the local circumstances and carriageway conditions, and takes into account the rates of deterioration which depend on factors such as traffic, drainage, weather and ground conditions.
9. With the backlog of maintenance required on the highway network, it has been necessary to prioritise work according to need, with road safety being the top priority. Addressing safety concerns has had to take precedence over other factors, such as visual appearance of the road surface and ride quality.