Highway Safety Inspection Policy Update

Report of the Head of Highways, Capital Development and Waste

1. **Background**

   Section 41 of the Highways Act, 1980, imposes a statutory duty upon Highway Authorities such as Devon County Council to maintain the highway network at public expense. Almost all claims against highways authorities relate to an alleged breach of Section 41. However, Section 58 of the act provides for a defence against such claims on the grounds that the authority has taken such care as is reasonably practicable for the appropriate type of traffic. The statutory duty placed on the Highway Authority requires it to have robust policies in place such as a Highway Safety Inspection Manual.

   The Highways Safety Inspection Policy defines how we identify, classify and deal with highways safety defects. It also specifies the frequency and nature of highway inspections. The policy sets out how safety defects identified during highway inspections are dealt with, including signing, guarding or repairing defects to make the network safe.

   Defects may be reported by the public, in which case they are evaluated to be dealt with in accordance with Policy.

   The budget allocated for the repair of safety defects in 2015/2016 financial year is £6.5m derived from the revenue budget. The nature and development of safety defects is dependent on a number of factors including the condition of the network and the impact of weather. Such external factors do represent a challenge in budget setting and management however robust procedures are in place to offset this. The bar chart below indicates how the safety defect budget was spent during the 2014/2015 financial year with footways shown under ‘grey gangs’.

Highways policies need to reflect the efficiencies needed to meet the austerity challenge whilst continuing to follow national best practice and ensuring as far as possible consistency with neighbouring authorities. The development of a risk based approach to managing safety defects will aid in delivering these challenges whilst maintaining a highway network that is as safe as reasonably practicable for all highway users.

![Safety Defect Net Expenditure 2014/15](image)
This report provides an update to the Place Scrutiny Committee on progress made to date on trials of a new policy in the way we deal with Highway Safety Defects. The Cabinet resolution passed on 14th October 2015 delegated authority to the Head of Highways, Capital Development and Waste Highways in consultation with the County Solicitor and Cabinet Member for Highway Management and Flood Prevention to implement these trial changes.

2. **Update on Trialled Policy Changes**

A series of trial changes to Policy (The Highways Safety Inspection Manual V5.0 February 2012 as amended by Cabinet on 12 December 2012) were identified and introduced following consultation with the County Solicitor and Cabinet Member for Highway Management and Flood Prevention in November 2015.

Key amendments have included:
- Permanent repair response times on footway maintenance category 2, 3 and 4 amended giving more time for the repair to be undertaken.
- Definition of worn or illegible road marking amended to give a clearer intervention level. Definitive response time for permanent repair now 28 working days
- Specific action when dealing with missing wolf eyes (designed to deter deer from running across the highway).
- Metalled public rights of way in urban areas inspection frequency amended to 3 yearly.
- Permanent repair response time on carriageways 8 to 10 amended to 28 working days.
- Additional policy guidance on historic highway features including shop canopies and cellar gratings.

3. **Benchmarking and Consultation**

The current Highway Safety Inspection Manual was benchmarked against other Highway Authorities and the National Code of Practice ‘Well Maintained Highways’ (NCoP). The NCoP is currently being reviewed and the draft document to be named ‘Well Managed Highway Infrastructure’ was issued for wider consultation in 2015. This new document has focused more on the use of risk management processes, recommending this as an approach that should be adopted by Highway Authorities. It is anticipated the new code will be published later in 2016 along with supporting guidance. Devon County Council are involved in a national steering group formed to re-write ‘Highway Risk and Liability Claims’ and include advice ‘Risk Based Approach to Service Provision’.

Benchmarking has been undertaken in relation to defect intervention levels, response times and inspection policy and procedure. Highway Safety Inspection manuals from the following authorities have been reviewed and benchmarked:

- Cornwall Council
- Torbay Council
- Somerset County Council
- Dorset County Council
- Gloucestershire County Council
- Leicestershire County Council
- Essex County Council
- South Gloucestershire County Council
- Cumbria County Council
- Norfolk County Council
• Staffordshire County Council
• Swindon Borough Council.

The risk based approach has been used by other authorities nationally; the current system being developed has adapted a risk matrix and response table currently used by Staffordshire County Council. This table has also been developed using the ‘Devon Way’ of risk management.

Prior to trials taking place the general theme of a risk based approach and the challenges associated with dealing with highway safety defects were discussed as part of the Devon Highways Parish Conferences in the Autumn of 2015. Key feedback received on the matter included the desire to see more focus on solving underlying problems, permanent repairs and in some instances changing the materials/method used in repair. Examples included, where appropriate, the replacement of paving slabs with tarmac to reduce scope for tripping and use of jet patching to minimise the duration of a road closures.

Throughout the project, consultation has been undertaken with the County Solicitor’s Office, our insurers Solicitors Browne Jacobson and various officers within Devon Highways including our term maintenance contractor South West Highways.

4. Findings to Date

There are no indications that the trial changes introduced in December 2015 have had any adverse financial impact on the Authority. Any increases in overall safety defect costs over this period are related to damage caused by recent storms and winter damage in general. There had been risk that costs could have increased further to an increased emphasis on solving underlying problems associated with lower cost repairs such as with footways, to date though this has not transpired and will be monitored.

There has not been an increase in highway claims relating to personal injury or property damage although it should be born in mind that claims are not usually made until sometime after the alleged incident.

The trial amendments to the Highway Safety Inspection Manual have started to align Devon County Council with other highway authorities both within the South West and nationally in particular when related to response times. These extended response times have allowed for repairs to be undertaken within policy even with the increase in reports following the storms over the Christmas period and early February 2016.

5. Further Trials and Next Step

Building on the risk managed approach to Safety Inspections already adopted by Devon County Council further trials are being proposed to develop an inspection regime that utilises a risk assessment process to determine the degree of risk a defect that meets minimum intervention limits poses to a highway user. Details of the proposed risk assessment grid and output table are shown in Appendix 1, which includes worked through examples as to how the process would work and how we may respond to defects in the future. This process will also allow Devon County Council to view all options available to them relating to the repair of identified defects, ranging from monitoring to planned maintenance. Important ongoing and future work to aide development of the new policy includes:

• Further ‘non-live’ testing of the new approach compared to the current approach to ascertain the likely impacts of change such as in terms of cost and impact on staff / contractor resource.
Subject to the above, we intend to ‘live’ trial the risk assessment approach ie switch from the old approach to the new approach on a trial basis, following consultation with County Solicitor and Cabinet Member and associated roll out of training to staff.

The results and costs from the various trials will continue to be monitored and reviewed.

A Cabinet report will be prepared and presented in the coming months, currently scheduled for May 2016, with any proposed changes to the Safety Inspection Manual being presented for approval. The report would include findings of the trials and include feedback received, such as from this Committee, our contractor and staff, as well as relevant benchmarking information and how any identified risks would be managed.

6. Summary

It is considered that the development of a risk based approach in dealing with safety defects will put Devon County Council in a strong position when the anticipated changes are made to the National Code of Practice, later in 2016, as opposed to having to react once amended.

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Local Government Act 1972: List of Background Papers

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Background Paper Date File Reference

ms220116psc Highway Safety Inspection Policy Update
hk 05 240216
Risk Matrix, Results Table and Worked Examples

Using the risk matrix in Table 1 an inspector, following a clearly defined process will be able to reasonably assess if a defect that meets a prescribed intervention level is likely to cause a danger or serious inconvenience.

<table>
<thead>
<tr>
<th>IMPACT</th>
<th>PROBABILITY / LIKELIHOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rare (1)</td>
</tr>
<tr>
<td>None (1)</td>
<td></td>
</tr>
<tr>
<td>Negligible (2)</td>
<td></td>
</tr>
<tr>
<td>Minor (3)</td>
<td></td>
</tr>
<tr>
<td>Moderate (4)</td>
<td></td>
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<tr>
<td>Serious (5)</td>
<td></td>
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</tbody>
</table>

Category 4 (Low Risk) Consider an appropriate response including no further action/monitor
Category 3 (Medium Risk) Repair within 28 working days
Category 2 (High Risk) Make safe or repair within 7 working days
Category 1 Make safe or repair by end of the next working day

Defects identified that pose a threat to life are considered an emergency and must be made safe or repaired urgently, normally within 2 hours.

For example:

Probability/likelihood = 4 (likely)
Impact = 4 (moderate)
Risk factor = 16 (high risk)
Response = Category 2 – Make safe or repair within 7 working days

The risk factor is calculated from the probability/likelihood multiplied by the level of impact and the result determines nature and time of response. More detailed worked examples are given in below to provide guidance to inspectors when determining the level of risk a defect may pose.
Worked Examples

Example 1

Defect - Carriageway pothole
Carriageway Maintenance Category – 3
Position of defect – wheel track
Dimensions – 45mm deep and 350mm in a horizontal direction

Assessment procedure

1. Does the defect meet the minimum intervention level
2. Consider the probability/likelihood score
3. Consider the impact score
4. Calculate the level of risk
5. Apply outcome and assign the appropriate response time

Answers

1. Yes, the minimum intervention level is 40mm deep and 300mm in any horizontal direction
2. Probability/likelihood almost certain, carriageway is m/c3 and defect is in the wheel track. The probability/likelihood score is 5
3. Impact high, pothole may cause vehicular damage, loss of control impact lower unless a cyclist or motorcyclist however this is mitigated by less likelihood of an interaction with the defect. The impact score is 4.
4. Probability/likelihood x impact = level of risk.
   $5 \times 4 = 20$
5. Level of risk 20 is a Category 1 defect requiring an end of next working day response.

Example 2

Defect – Footway Pothole
Footway Maintenance Category – 2
Position of defect – against the boundary wall
Dimensions – 30mm deep and 70mm in a horizontal direction

Assessment procedure

1. Does the defect meet the minimum intervention level
2. Consider the probability/likelihood score
3. Consider the impact score
4. Calculate the level of risk
5. Apply outcome and assign the appropriate response time
Answers

1. Yes, the minimum intervention level is 20mm deep and 50mm in any horizontal direction
2. Probability/likelihood unlikely, footway is m/c 2 and defect is in the against a boundary wall. The probability/likelihood score is 2
3. Impact minor, the potential impact on an individual if they were to be tripped up is high. The impact score is 3.
4. Probability/likelihood x impact = level of risk.
   \[2 \times 3 = 6\]
5. Level of risk 6 is a Category 3 defect to be repaired within the next 28 working days.

Example 3

Defect – Footway trip
Footway Maintenance Category – 1
Position of defect – underside of bench
Dimensions – 30mm vertical level difference

Assessment procedure

1. Does the defect meet the minimum intervention level
2. Consider the probability/likelihood score
3. Consider the impact score
4. Calculate the level of risk
5. Apply outcome and assign the appropriate response time

Answers

1. Yes, the minimum intervention level is 20mm vertical level difference
2. Probability/likelihood rare, footway is m/c1 and defect is under the bench. The probability/likelihood score is 2
3. Impact high, the potential impact on an individual if they were to be tripped up is high. The impact score is 1.
4. Probability/likelihood x impact = level of risk.
   \[2 \times 1 = 2\]
5. Level of risk 4 is a Category 4 therefore consider an appropriate response including no further action/monitor.

NOTE
The position of the defect will not pose any risk to a highway user therefore an option being considered is the policy advises defects that pose no risk are not recorded.
Example 4

Defect – Carriageway Defective Roadmarking
Carriageway Maintenance Category – 7
Position of defect – in Carriageway
Nature of defect – SLOW letters worn in excess of 80%

Assessment procedure

1. Does the defect meet the minimum intervention level
2. Consider the probability/likelihood score
3. Consider the impact score
4. Calculate the level of risk
5. Apply outcome and assign the appropriate response time

Answers

1. Yes, the minimum intervention level is 70% worn
2. Probability/likelihood possible, carriageway is m/c 7 and defect is The probability/likelihood score is 3
3. Impact minor, the roadmarking is usually supported by associated warning signs mitigating the impact. The impact score is 3.
4. Probability/likelihood x impact = level of risk.
   \[3 \times 3 = 9\]
5. Level of risk 9 is a Category 3 defect to be repaired within 28 working days.