# **Dorset County Council**

# POLICY TO MANAGE THE SKID RESISTANCE ON DORSET'S ROADS 2017 Revision



Policy written by: Mike Hansford, Asset and Performance Manager

Policy Authorised by:

**Date of Authorisation:** 

### **Skid Resistance Policy Revision November 2017**

#### Introduction

This document replaces the Skid Policy dated January 2013 to ensure conformance to the new guidance set out in HD28/15 of the Design Manual for Roads and Bridges (DMRB) for the management of skid resistance on the network.

The management of skid resistance on the highway refers to the frictional properties of the road surface in wet conditions. The skid resistance of a wet or damp road surface can be substantially lower than the same surface when dry, and is more dependent on the condition of the surfacing material.

The management of skid resistance is a significant activity in promoting the safety of highway users; one of the key corporate objectives of the County Council.

#### Dorset's Skid Policy

As the DMRB is primarily intended for use on the UK Strategic Road Network, managed by Highways England, Dorset County Council will adopt elements of the guidance documented in the revised standard HD28/15 (the Department for Transport's guidance on how skid resistance should be managed), appropriate to its network.

The policy will define our approach to the management of skid resistance on the network, to include the process for identifying and investigating priority sites.

#### Skid Policy Objectives

To meet the statutory requirement to maintain the public highway

To set out the strategy for managing skid resistance on the network

Set out the process for both initial and detailed investigation

Document the process for identification and prioritisation of sites where remedial works are required

Demonstrate compliance with the guidance documented in the DMRB

#### Service Performance Outcomes

This policy supports the Service outcomes of 'Supporting Safe Travel' as set out in our Performance Framework, which links to corporate objectives of 'Safe' and 'Prosperous'.

We can measure how effective we have been through monitoring and reporting on :

Trends in the number of people killed or serious injured

The number of overall collisions on the network

The percentage of network that that is above the minimum level of skid resistance

The percentage of the population feeling safe on Dorset's roads

Targets for these outcomes will be set out in the annual Highways Service Plan.

#### How will we do this?

Dorset County Council will apply this policy to its higher use roads, to include annual SCRIM surveys, which include the following:

Hierarchy 2	Strategic routes Strategic routes
Hierarchy 3	Main distributors
Hierarchy 4	Secondary distributors

Additional sites on any road hierarchy may be identified through liaison with partner organisations including the Police and with the Collision Reduction Team. Further surveys may include SCRIM or Griptester.

Site categories / Investigatory Levels (IL) – HD28/15 specifies appropriate ILs based on site category. The network is assessed and assigned a site category, with an appropriate IL based on an assessment of collision history.

The assigned IL will relate to the table (figure 1 below) in the DMRB and is subject to a review of collision history at individual locations to determine an appropriate IL.

Figure 1 – HD28/15 Possible ILs for each site category

Site Category and definition		IL for CSC data (skid data speed corrected to50km/h and seasonally corrected)							
		0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65
Α	Motorway								
В	Non-event carriageway with one-way traffic								
С	Nón-event carriageway with two-way traffic								
Q	Approaches to and across minor and major junctions approaches to roundabouts and traffic signals (see note 5)								
К	Approaches to pedestrian crossings and other high-risk situations (see note 5)								
R	Roundabout								
G1	Gradient 5-10% longer than 50m (see note 6)								
G2	Gradient >10% longer than 50m (see note 6)				l'				
S1	Bend Radius <500m –								

	carriageway with one-way traffic (see note7)		
S2	Bend Radius <500m – carriageway with two-way traffic (see note7)		

A review of Dorset's site categories and investigatory levels was carried out in June 2017 by 'Yotta' and updated in the Horizons Asset Management software.

In line with recommendations in the guidance; ILs will continue to be reviewed every three years, thereafter.

#### Data Collection

The standard specifies scientific methods for the assessment of skid resistance. Dorset County Council will apply the CSC (Characteristic SCRIM Coefficient) methodology.

SCRIM\* surveys will be carried out using an accredited survey machine in 'wet' conditions, replicated by the SCRIM survey method. These surveys will be conducted in early, mid and late seasons, for the purpose of seasonal corrections, over a three year cycle, as set out in the table below:

Year	Timing of SCRIM survey					
2018	Early season	1st May - 20th June				
2019	Mid season	21st June – 10th August				
2020	Late season	11th August - 30th Sept				
2021	Early season	1 <sup>st</sup> May – 20 <sup>th</sup> June				

The recorded CSC value is compared to the It to identify a SCRIM difference which highlights lengths of road that have fallen below the minimum level of skid resistance.

#### Site Identification - Initial desktop study

A desktop study will be carried out as soon as is practicable, on receipt of the data, having been processed and loaded into the Horizons asset management software.

The desktop study will include:

- A data validation exercise
- Identification of priority sites for detailed investigation based on SCRIM data and five years of collision data. This will be managed through our Horizons Asset Management software to identify sites with the highest risk in relation to skid resistance.

Based on the scoring matrix documented in table below from HD28/15 a report in Horizons will score priority sites with the highest scoring sites being identified for detailed investigation.

<sup>\*</sup> SCRIM is the registered trade mark of W.D.M. Limited

Priority 1 Sites for Detailed Investigation

	Scores and Criteria						
Number of Crashes	0	1	2	3+			
Score	0	4	8	12			
Likely impact of a crash	Slight	Slight/Serio us	Serious	Serious/Fatal			
Score	1	2	3	4			
Skid resistance difference (SD)	>0	>-0.05 and <0	>-0.10 and <- 0.05	>-0.15 and <- 0.10	<- 0.15		
Score	0	1	3,	6	12		
Site has SD <0 and poor texture at the same point	No	Yes					
Score	0	1					

Analysis of current data indicates that scores range from 1 (low risk) to 29 (high risk). Dorset Highways will carry out a detailed investigation as a matter of priority, to sites scoring 24 or above.

#### Detailed site investigations

Sites identified through the desktop analysis will be investigated by a competent individual which will typically be Project / Design Engineers in the Asset and Performance Team, with support from the Collision Reduction Team.

The main objectives are:

- To determine whether a surface treatment is justified
- To determine whether some other form of action is required (to include enforcement (eg hedges), re-profiling, or referral to the Casualty Reduction Team for a review of the site layout and/or markings.
- To determine whether the site should be kept under review to determine whether the IL is appropriate.

The findings of the investigation will be documented on the 'Detailed Site Investigation Report' form (documented in Appendix A).

## Erection of 'slippery road' signs

Following detailed site investigations, where remedial works have been identified, 'Slippery Road' signs will be put out until such time that this risk has been removed or mitigated.

Site Investigation Report

1. General:				
Date:	Inspecte	ed by:		Method- On site:
	110-77-10-1100			
Weather at time of visit:			400	
Reason for visit:				
Dates of any previous visits			Low grip tester or scrim:  Routine review: Accident report:	
			Document reference:	
2. Site Details:	LATE OF			
Road classification:				
Road name:				hr. Min
Investigatory Level:				
Have any layout changes bee to the site since investigatory was assigned:				
3. Visual Assessment:				
Surfacing type:			v V	
Surface condition/texture:				
Presence of debris or other co	ontaminat	ion:	Hagil	
Local defects (potholes, fattir	g up etc):			
Is the drainage adequate:			1 . ilis - 1 100	
Are there any issues with surf	ace profile	e:		
4. Road users:				
Volume and type of traffic:				
Traffic speeds in relation to re	oad layout			

Evidence of crash damage:					
5. Road Layout:					
Is the layout appropriate for	or vulnerable road users:				
Are junctions appropriate	for turning manoeuvres:				
6. Markings Signs and Visit	oility:				avousings).
Are traffic signals, signals, condition and clearly visible					
Clear sight lines/visibility o	of queues/ vegetation:				
7. Additional Information:			42/16/1		
8. Recommendation (Y/N)					
Is treatment required:					
Review IL:					
What type of treatment:					
Review routine maintenar	nce:				
Other action required:		M. Commence	Name and the second		CACTO A STANCE
9. Approval:					
Print Name:	Signature:	Date:		Approved by:	Date:

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