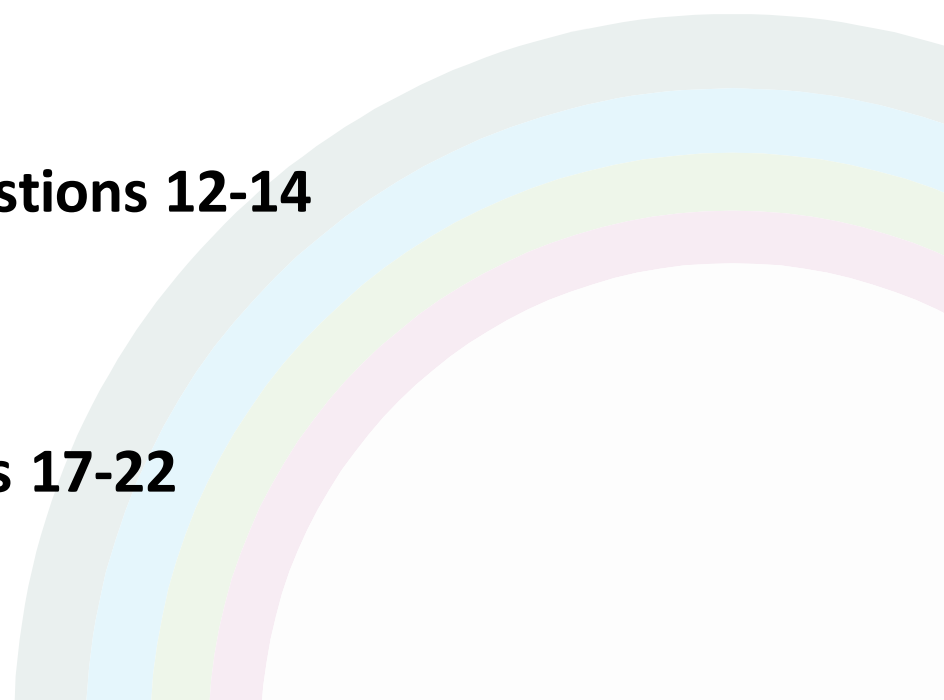


Today's Programme

- 0900** Welcome & coffee
 - 0930** Latest update of Self-Assessment
 - 0945** Asset Management questions 1-6
 - 1115** Morning break
 - 1130** Asset Management questions 7-8
Resilience questions 9-11
 - 1300** Lunch break
 - 1330** Customer interaction questions 12-14
Efficiency 15-16
 - 1445** Afternoon break
 - 1500** Service Delivery questions 17-22
 - 1615** Close
- 
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Self Assessment Workshop

Session 2 Questions 7-11

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7. Has your local authority identified the appropriate competencies required for highway infrastructure asset management and what training may be required?

Level	Specific description	Evidence
1	<p>The need for asset management competencies has not been identified.</p> <p>or</p> <p>The need to identify competencies has been understood but no positive actions or training undertaken.</p>	None
2	<p>The competencies for key asset management roles have been identified, individual competency has been assessed against these roles and development action plans developed accordingly. This includes an assessment of the need for training of key individuals. Staff competencies are reviewed on an annual basis.</p>	<p>Staff development action plans, any relevant training undertaken, and annual reviews. All relevant staff have undertaken the HMEP e-learning Toolkit for Highway Infrastructure Asset Management.</p>
3	<p>In addition:</p> <p>Vocational, educational and professional training identified in the staff development action plans has been funded and is underway for all key staff involved in asset management. Regular communication between those undertaking key roles including sharing knowledge and “lessons learnt” is undertaken. A competency framework, such as that used in PAS55/ISO 5500 or the Institute of Asset Management, has been rolled out and individuals undertaking key roles in asset management have participated. Competencies are regularly reviewed as part of individual development action plans.</p>	<p>Individual development and training records, knowledge sharing, implementation of a relevant competency framework.</p>

Has your local authority identified the appropriate competencies required for highway infrastructure asset management and what training may be required?

A competent and motivated staff team will support the delivery of asset management. Where the primary role of staff is related to asset management it is important that their individual development in asset management is reflected in their training and personal development plans. This should be led by the most competent person in asset management in the authority. For this question, only staff whose primary role is related to asset management need to meet the criteria.

It is recognised that there are limited opportunities in respect of training. In order to support training, HMEP has made available the e-learning Toolkit for Highway Infrastructure Asset Management. It is recognised that this is not aimed at expert practitioners but will give those undertaking asset management a grounding in its principles. As a minimum all authorities at Level 2 would be expected to have completed this training. Where authorities wish to develop their expertise further, and resources are not available, they should consider working in collaboration with other authorities.

Authorities who are at Level 3 will have staff with up-to-date knowledge and experience, commensurate with professional training related to asset management. Key staff's skills and knowledge are monitored against a competency framework, and they share the lessons they have learnt with their peers.

Resource: [HMEP / UKRLG Highways Infrastructure Asset Management Guidance](#)

Resource: [HMEP e-learning for Highway Infrastructure Asset Management](#)

ASSET MANAGEMENT TRAINING COURSE

HMEP
Highways Maintenance Efficiency Programme

> INTRODUCTION

This package of asset management training modules has been developed as part of the Highways Maintenance Efficiency Programme (HMEP), funded by the DfT, and is intended for use by all local highway authorities in England.

The module content is based on the UKRLG / HMEP Highway Infrastructure Asset Management Guidance document which is publicly available from the UKRLG website.

Click the HELP button for information on navigating



HOME MENU HELP MUTE EXIT 1/34 < BACK NEXT >

CIHT **HMEP**
Highways Maintenance Efficiency Programme

Name:

Completion of on-line Asset Management Training

Module 1: **Introduction to
Asset Management**

Date:

This certificate can be added to your CPD record when the following sections have been completed

What were your reasons for taking this course?

What were the main learning points?

How will you use what you have learnt?

For more on CIHT's CPD scheme, contact: education@ciht.org.uk
or go to www.ciht.org.uk/cpd

PRODUCED BY **ATKINS**

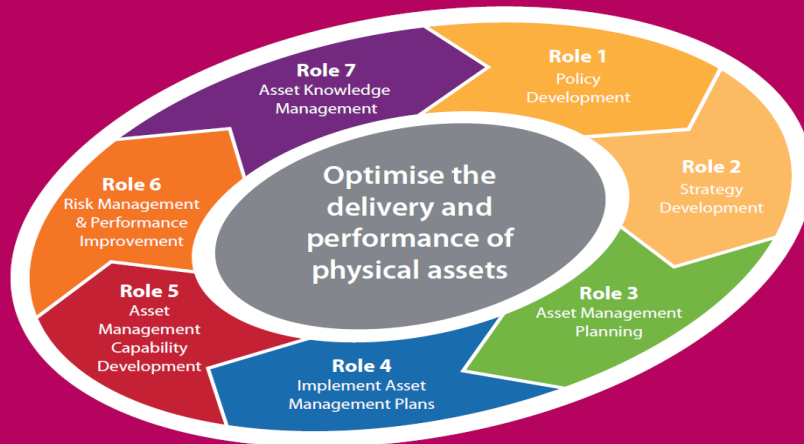
IAM Competences Framework



1 The IAM Competences Framework

The Requirements: Version 2 November 2012

The IAM Asset Management Competence Requirements Framework

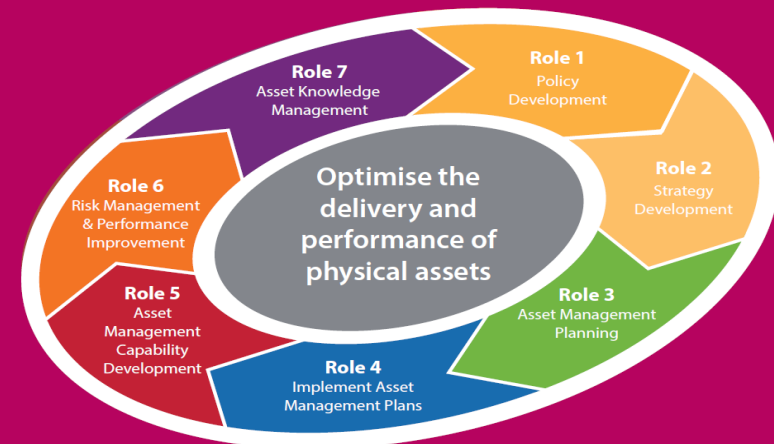


2 The IAM Competences Framework

Guidance: Version 2

November 2012

Guidance on using the 2012 Asset Management Competence Requirements Framework



8. Does your local authority have a comprehensive approach to managing current and future risks associated with the highway infrastructure assets?

Level	Specific description	Evidence
1	<p>Risks associated with asset management are not considered.</p> <p>or</p> <p>There is an understanding amongst key staff that risk must be managed but there is no approach developed.</p>	None
2	<p>A documented process to assess risk associated with the management of assets is in place for all activities of the highways service and communicated to relevant stakeholders consistent with the corporate approach to risk. This includes regular assessment of risks, communication of those risks and their management. Risk is also considered as part of the decision-making process for investment and programme development for maintenance schemes.</p>	<p>Documented process for the communication and management of risk, risk register and evidence updated on a regular basis, demonstrating that the implemented mitigation actions are recorded.</p>
3	<p>In addition:</p> <p>Approach to management of risk is continually improved and appetite to risk is clearly documented. "Lessons learnt" around the management of risks are regularly recorded at all levels of the organisation. Documented approach to management of critical infrastructure on the network exists together with documented contingency plans.</p>	<p>Lessons learnt register; risk based asset management plans exist for critical infrastructure.</p>

Does your local authority have a comprehensive approach to managing current and future risks associated with the highway infrastructure assets?

To support asset management authorities should have an understanding of:

- Those assets that are critical to the functioning of the network.
- Things that could affect the delivery of the required performance, including meeting stakeholder expectations.
- The level of funding.
- The level of risk that is acceptable.
- Options to mitigate all those risks deemed unacceptable.

A Level 1 authority has not considered the risks associated with asset management or has an understanding amongst key staff that risk must be managed.

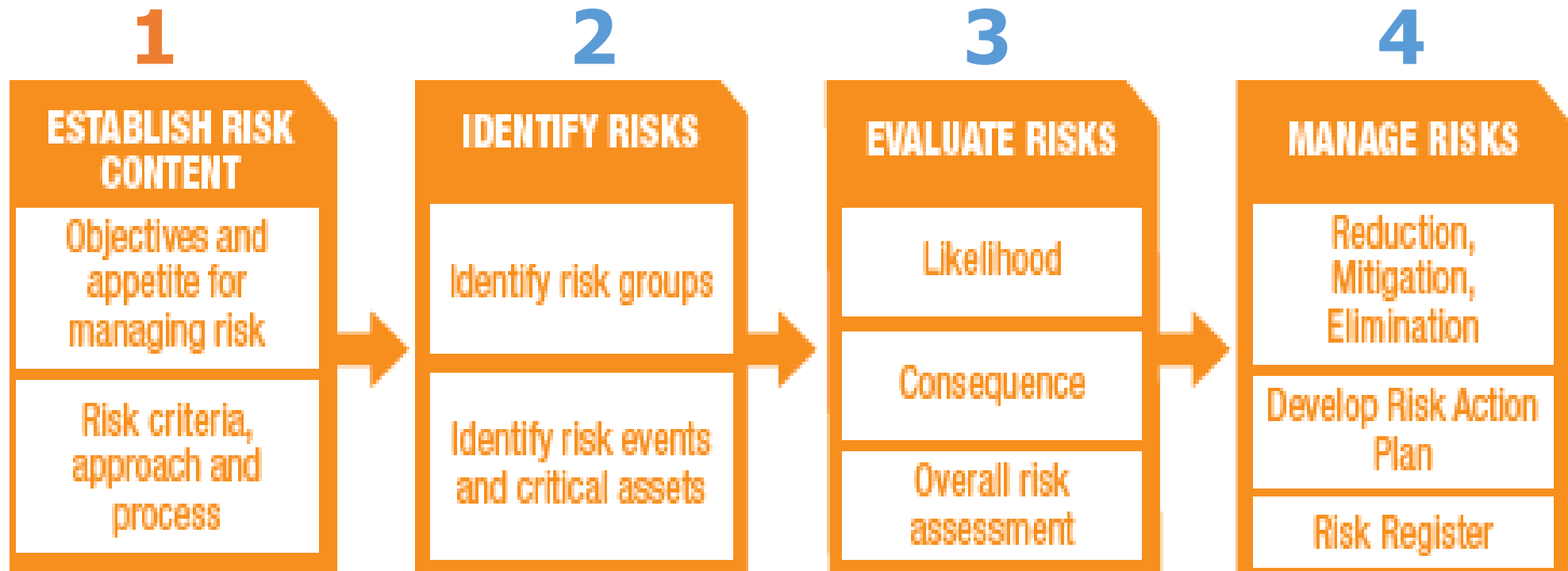
A Level 2 authority has a documented process to assess risks associated with the management of highway assets, including a regular assessment of risks, communication of those risks and their management.

A Level 3 authority has an approach to the management of risks that is continually improved. "Lessons learnt" around risks are regularly recorded at all levels in the organisation. There is a documented approach to the management of critical infrastructure on the network with documented contingency plans.

Resource: [HMEP / UKRLG Highways Infrastructure Asset Management Guidance](#)

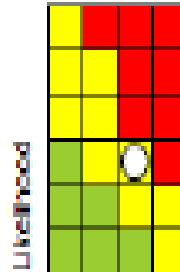

Resource: [Alarm Guidance on managing the liability risks of the highway infrastructure asset](#)

A 4 stage approach to Risk Management



A qualitative risk matrix approach

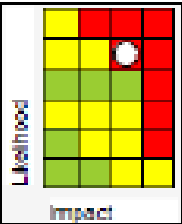
LIKELIHOOD OF EVENT OCCURRING	CONSEQUENCE OF EVENT OCCURRING				
	NEGLIGIBLE	LOW	MEDIUM	HIGH	SEVERE
NEGLIGIBLE	1	2	3	4	5
VERY LOW	2	4	6	8	10
LOW	3	6	9	12	15
MEDIUM	4	8	12	16	20
HIGH	5	10	15	20	25
KEY TO RISKS					
LOW		MEDIUM		HIGH	

Risk Code & Title	SR07.2012/13 Asset Management					Current Risk Matrix
Description	<p>The Council has established additional governance structures relating to the capital programme but recognises that its management of capital spend has to improve following slippage in previous years. New arrangements are in place to monitor the programme and identify, at an early stage, any potential barriers to fully implementing the capital programme. The risk to the Council is that it does not deliver its investment plans on time, impacting adversely on outcomes.</p>					 <p>Likelihood</p> <p>Impact</p>
Risk Status	Warning	Risk Traffic Light		Current Risk Score	9	Assigned To
Potential Effect	<p>A failure to improve will lead to further slippage of the capital programme and adverse scrutiny. Where investment plans are not delivered on time additional and unplanned costs may be incurred. Any failure to achieve investment plans will also impact directly upon key business priorities of the Council.</p>					Yvonne Bauk; Laura Friel
Internal Controls	<p>Review undertaken of Capital Programme concentrating on major projects targeted at meeting the Council's core objectives. Further development of the Capital Programme Asset Group with the implementation of improved project planning principles aimed at ensuring a more efficient and tighter control of capital budgets. Better utilisation of overall resources bringing forward capital projects to utilise projected shortfalls. Individual Asset Management Plans established for identified key asset themes.</p>			Risk Next Review Date	31-Jan-2013	

Linked Actions

Linked Actions Code & Title	Due Date	Assigned To
SP1213FI_A_E03 Progress the Council's Interim financial strategy	31-Mar-2013	Yvonne Bauk
SP1213FI_A_E04 Update the Financial Strategy	31-Mar-2013	Yvonne Bauk
SP1213FI_A_E05 To develop a five-year financial planning model that recognises, and is sensitive to, key variables	31-Mar-2013	Yvonne Bauk
SP1213FI_A_E12 To develop CPAG to ensure delivery of capital investment programme, to avoid slippage and to ensure compliance with the Council's priorities	31-Mar-2013	Hazel Hair
SP1213FI_A_E22 Progressing the Action Plans from the five Finance and Infrastructure Asset Plans	31-Mar-2013	Angus Bodle; Craig Hatton

North Ayrshire Council | 'Place' Directorate Plan 2015/18

Risk Code & Title	PL04 Failure to maintain infrastructure assets to an acceptable standard	Current Risk Matrix
Risk	Failure to maintain infrastructure assets to an acceptable standard	
Consequence	The risk is that the physical assets are not sufficiently maintained to enable their safe use and; the health within our tree and woodland stock is not maintained or safeguarded, leading to a significant loss of amenity value and reduced ability to provide biomass fuel.	Current Risk Score
Current Controls	<ul style="list-style-type: none"> ■ Asset Management Plans and supporting investment programmes are established and in place. ■ Inspection regimes utilising industry guidance and best practice are in place to pro-actively identify defects. ■ Working with the Scottish Government, Forestry Commission and landowners to assess the extent and affected locations in order to eradicate Phytophthora disease and Ash dieback (Charla fraxinea). ■ The in-house team managed information on the diseases and identifies the actions to prevent spreading including Sanitation felling, decontamination of tools, equipment and protective clothing used. A 10 year strategic plan is being development for the management of trees and woodlands. 	15
Linked Actions		
Linked Actions Code & Title	Continue to develop and implement actions arising from the Fleet Asset Management Plan	
	Continue to develop and implement actions arising from the Open Space Asset Management Plan	
	Continue to develop and implement actions arising from the Roads Management Plan	
	Continue to develop and implement actions arising from the Housing Asset Management Plan	
	Continue to develop and implement actions arising from the Property Management Asset Management Plan	
	Implement low energy efficient street lighting across North Ayrshire	



Highways Maintenance Efficiency Programme

Example of a highway service risk register



Record type	ID	Title	Owned by	Status	Review date	Current Risk level	Residual Risk Level
Risk	431	Delivery of Surface Dressing Programme 13/14	Davies, Rebecca	Open	30-Jul-13	VH (24)	H (18)
Risk	432	Reputational risk of non delivery of Highways Local	Harries, Kris	Open	30-Jul-13	VH (22)	H (18)
Risk	437	May 2013 Elections	Marsh, Simon	Open	30-Jul-13	M (13)	L (8)
Risk	445	Serious accident claim at Risford surface dressing site	Davies, Rebecca	Open	30-Jul-13	VH (23)	H (19)
Risk	481	Burnshall PI claim	Davies, Rebecca	Open	30-Jul-13	H (18)	M (13)
Risk	1233	Delivery of Beechbridge Major Project	Davies, Rebecca	Open	30-Jul-13	H (20)	L (8)
Risk	1481	Loss of hearing claim - J Riley	Harries, Kris	Open	30-Jul-13	VL (3)	VL (2)
Risk	1587	Surface dressing programme - remedial works - accidents	Marsh, Simon	Open	30-Jul-13	H (18)	M (12)
Risk	1752	Fatal on B4565 16 Feb 2013 on road that had recently been surface dressed - Privileged and Confidential	Marsh, Simon	Open	30-Jul-13	H (18)	M (12)
Risk	2414	Mike Davies - Claims	Harries, Kris	Open	30-Jul-13	VL (4)	VL (2)
Risk	2638	Lower Lingsford Safety Scheme	Davies, Rebecca	Open	30-Jul-13	VL (3)	VL (3)
Risk	3410	Change in key stakeholders associated with the Highways Contract	Marsh, Simon	Open	30-Jul-13	M (13)	L (7)
Risk	3817	A797 between Burrow's Lodge and Green Carr (pedestrian fatality)	Marsh, Simon	Open	30-Jul-13	H (19)	M (13)
Risk	4010	Potential claim from Authority for Fatal Accident at A790 Crallinge - Privileged and Confidential	Marsh, Simon	Open	30-Jul-13	H (19)	M (13)
Risk	4128	Claim from Accident at work - Muhammed Tahir	Denby, John	Open	30-Jul-13	M (14)	M (14)
Risk	4598	Potential Claim from Accident at Work - Robert Lovelace	Harries, Kris	Open	30-Jul-13	M (14)	M (14)
Risk	4621	Potential criminal investigation into Fatality at B4282 Redbath - Privileged and Confidential	Marsh, Simon	Open	30-Jul-13	VH (22)	H (18)
Risk	4739	Uninsured Plant	Denby, John	Open	30-Jul-13	VL (3)	VL (3)
Risk	4745	Revised policy does not match available resources and budget	Marsh, Simon	Open	30-Jul-13	M (13)	M (11)
Risk	4821	Lack of support for Highways Dept (HD) from LA staff in HD	Marsh, Simon	Open	30-Jul-13	M (13)	M (11)
Risk	4837	Claims arising from Healthcare checks	Harries, Kris	Open	30-Jul-13	M (14)	M (14)
Risk	4891	Pension deficit in ex-authority City DLO	Marsh, Simon	Open	30-Jul-13	M (13)	L (7)

9. Has your local authority established a resilient network as recommended by the 2014 Transport Resilience Review?

Level	Specific description	Evidence
1	<p>There has been no progress in identifying the authority's roads which are a priority in terms of ensuring resilience to extreme weather events – the "resilient network".</p> <p>or</p> <p>There is recognition of the need to identify a resilient network but limited progress has been made.</p>	None
2	<p>The process for developing the resilient network has been developed and documented. Liaison has been undertaken with key business, interest groups and other key transport stakeholders (e.g. Network Rail and bus operators). The resilient network has been agreed with senior decision-makers. All risks associated with adopting the resilient network have been documented together with mitigation.</p> <p>This should cover resilience against snow, ice and flooding, as a minimum.</p>	<p>The resilient network is defined, and documented processes exist for its management in the event of snow, ice or flooding. There is documented evidence of engagement with relevant stakeholders and there has been a formal process for its approval by senior decision-makers.</p>
3	<p>In addition</p> <p>The resilient network is reviewed at least every two years as part of contingency planning and updated after any relevant events, based on lessons learnt. It is used as a basis for decision making and included in the prioritisation criteria for relevant assets. It has been communicated with the public and is on the authority's website.</p> <p>This should cover resilience against exceptional heat, industrial action, major incidents and other local risks.</p>	<p>Two-yearly review of the resilient network, including updates after any relevant events. Information is made available to the public on the authority's website.</p>

Has your authority established a resilient network as recommended by the 2014 Transport Resilience Review?

The severe winter weather of 2013/14 had a major impact on transport systems, including many local roads which were flooded for prolonged periods. As a consequence of this disruption, the Secretary of State for Transport commissioned a Transport Resilience Review, which was published in July 2014. The Department for Transport supported all 63 Recommendations. A key recommendation of the 2014 Transport Resilience Review for Local Roads is “that Local Highway Authorities identify a ‘resilient network’ to which they will give priority, in order to maintain economic activity and access to key services during extreme weather.”

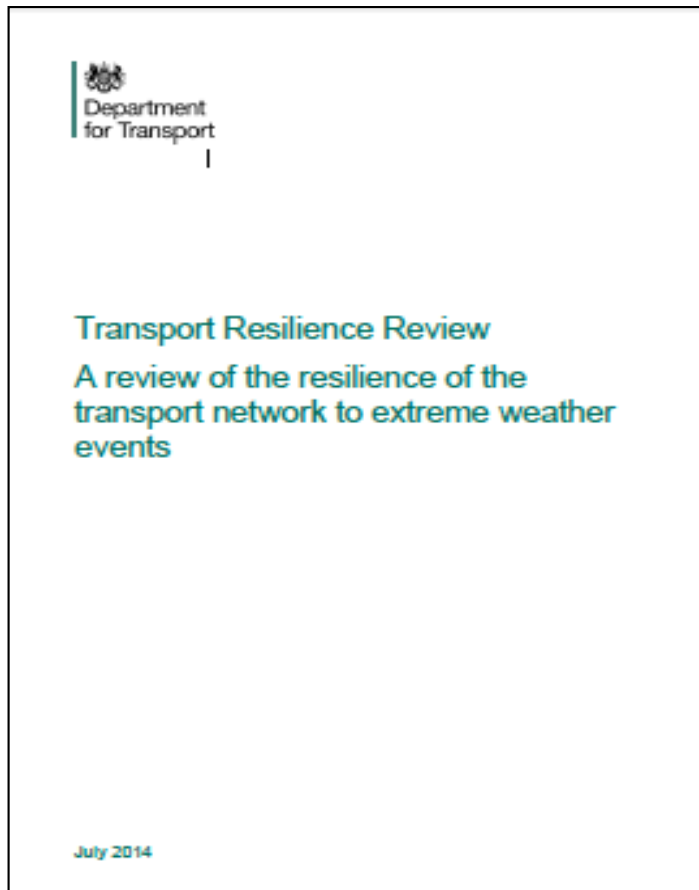
A Level 1 authority has made little or no progress to identify its resilient network.

A Level 2 authority has developed its resilient network, consulted with key stakeholders and had formal approval from senior decision-makers. All risks associated with the resilient network have been documented together with mitigation in the event of snow, ice or flooding.

A Level 3 authority has a process in place for reviewing its resilient network at least every two years, and updating it after any relevant events. The resilient network is being used as a basis for decision-making and included in the prioritisation criteria for relevant assets. Plans are in place for the management of events including exceptional heat, industrial action, major incidents and other local risks.

Resource: [Transport Resilience Review](#)

Transport Resilience Review

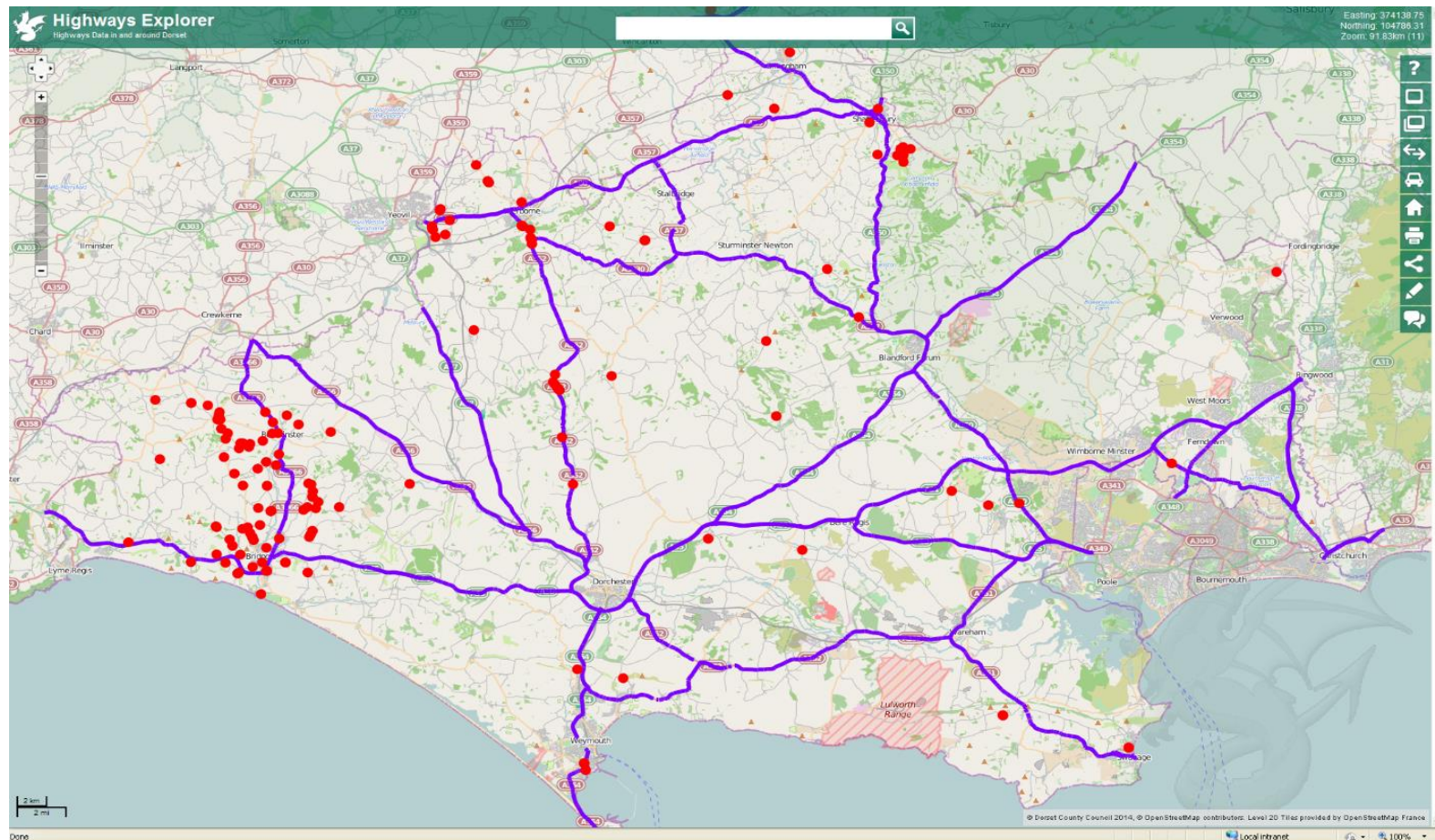


Recommendation 37

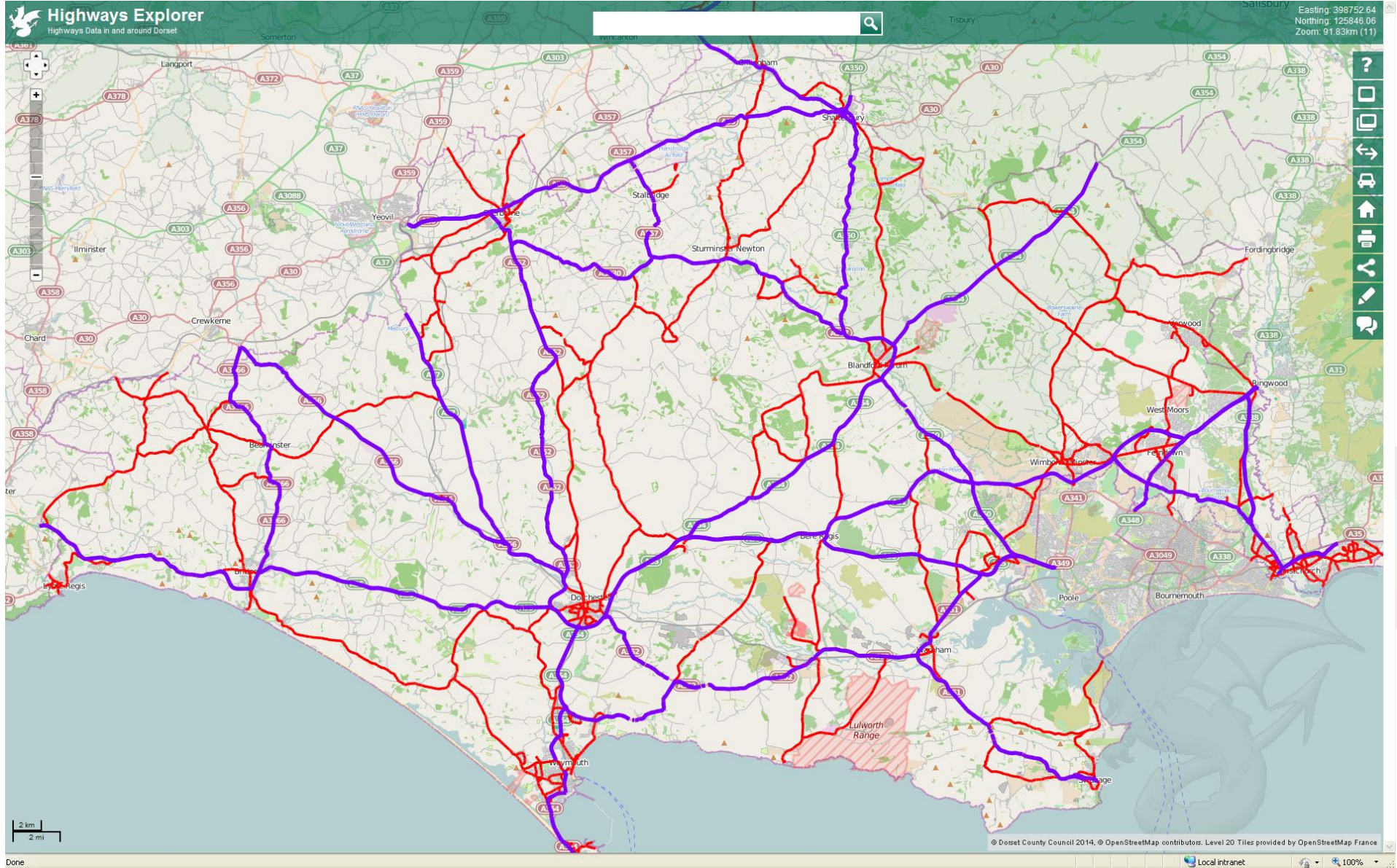
All Local Highway Authorities should make themselves familiar with the guidance and good practice promoted by the Highways Maintenance Efficiency Programme (HMEP) and ensure it informs their decision-making

Identifying Specific Vulnerabilities

- GIS inventory and incident data
- Flood Risk Strategy data
- Preliminary Slope Stability Assessments?
- Use of local knowledge



Define Resilient Network



Copy of Highways Climate Change Risk Register Sept 2014 [Compatibility Mode] - Excel

Mike Winter

Climate Change Adaptation Risk Register																								
		Directorate : Environment			Service: All - High Impact Risks																			
Completed by :					Date :			Version No :		1														
Service Area	Highway Asset Group	What is the identified RISK?	Near Term (2010-2015) Mid Term (Up to 2050) or Both Timescales	Positive or Negative Impact?	Weather/Climate Variables										What could TRIGGER this risk to occur?	CONSEQUENCES of this risk, to the service and/or the community?	What existing action / CONTROL exists to manage this risk?	Current Risk		Is the Level of Risk Acceptable?	Has the level of risk increased or decreased?	What FURTHER ACTION (if any) needs to be taken to reduce the risk?	By Whom	
					Intense Rainfall and Flooding	High Wind Speeds	Snow and Ice	Heatwaves/higher Temps	Droughts	Coastal Flooding & Erosion	Hotter Summers	Warmer Winters	Sea Level Rise	Migration/other				IMPACT	LIKELIHOOD					RISK RATING (Impact x Likelihood)
Example		Failure of drainage network	Near Term	Negative	X	X				X					Failure to conduct regular maintenance of the drainage network	Flooding on highways, resulting in increased risk of accidents and damage to road surfaces	Incident reporting and monitoring; inspection regime	Major	Possible	12	Yes	No Change	Periodic review of maintenance policy	Highways Manager
High Impact Risks																								
Highways and Cycleways		Increase in the temperature of the road structure (both at surface and internal structure)	Both Time Scales	Negative			X				X			A number of days with a consistently high temperature (Trigger temperature to be identified)	Localised damage to carriageways etc, localised disruption to traffic, increased maintenance costs, risk of cascade failures	No current control to manage this risk. Reactive response	Moderate	Almost Certain	15	NO	No Change	Project to assess the temperature trigger points for vulnerable roads and identify any necessary changes to material specifications programmed for 2012		
		Intense and prolonged rainfall events leading to landslips, embankment failures and collapse of retaining walls and structures	Both Time Scales	Negative	X						X			Increased frequency of intense rainfall events or prolonged periods of rainfall will increase the likelihood of failure of embankments and retaining structures as soils become saturated	Should an embankment or retaining structure fail then at the very least there will be disruption to the highway network and the worst case would result in fatalities	Current inspection regimes generally involve a visual inspection of the asset. More detailed investigations are needed to understand the potential for failure of such assets	Major	Likely	16	NO	No Change	Further work is needed to catalogue the most vulnerable retaining wall, retaining structures and embankments. Once this has been completed work must be prioritised to increase the resilience		
		Carriageway drainage network failure, the integrity of												Carriageway drainage network failure, the integrity of	Localised damage to carriageways etc, localised	Flood and Water Management Act responsibilities to prepare flood risk assessments						Further research needed to identify likely impact of flooding upon carriageways, drainage networks etc		

Page 1

High Impact Risks | Carriageway, footways, Cycleway | Verges, Hedges, Trees etc | Drainage | Bridges & Structures | Street Lighting | Public Rights of Way | Parking Services | Signing, Road Marking Etc | Depots and ...

READY | 17:26 | 30/10/2014

10. Has your local authority implemented the relevant recommendations of the 2012 HMEP Potholes Review - Prevention and a Better Cure?

Level	Specific description	Evidence
1	<p>Specific recommendations relating to local authorities (2, 3, 6, 7, 9, 10, 11, 12, 13, and 15) of the Potholes Review have not been implemented.</p> <p>or</p> <p>There is an intention to implement recommendations but limited progress has been made.</p>	None
2	<p>A review of the authority's current practice against the recommendations of the Potholes Review has been undertaken. Where this practice doesn't reflect the recommendations of the Potholes Review a prioritised action plan has been produced. If there is a need for changes to policy and investment a report has been produced to secure sign-off by the Executive.</p>	<p>A documented review has been undertaken of the authority's current practice against the recommendations of the Potholes Review.</p> <p>If required, a prioritised action plan.</p> <p>If required, a report to the Executive on the proposed policy changes and investment required to implement them.</p> <p>Recommendation 2 from the Potholes Review on Public Opinion Surveys relates to Question 12</p> <p>Recommendation 3 from the Potholes Review on Public Communications relates to Question 14</p> <p>Recommendation 15 from the Potholes Review on long term programming relates to Question 20</p>
3	<p>In adopting the relevant recommendations of the HMEP Potholes Review progress, has been monitored across a number of ongoing performance measures, for example:</p> <ul style="list-style-type: none"> • Response standards for defects. • A reduction in the need to undertake repeat repairs. • Improvements in public satisfaction. • Cost savings. 	Ongoing improvements in the performance of repairing potholes.

Has your local authority implemented the relevant recommendations of the 2012 HMEP Potholes Review – Prevention and a Better Cure?

As result of the increasing concern of damage caused to local roads by a succession of severe winter weather events, the Government commissioned HMEP to undertake a review into potholes. Published in 2012, the Review, titled Prevention and A Better Cure, made 17 Recommendations that if implemented will provide an overall improvement into the management of highway defects.

Recognising that those authorities that have already adopted the recommendations are demonstrating measureable improvements, this question is encouraging all local authorities to do so.

There are 10 relevant recommendations to local authorities out of the 17:

- 2 Public Opinion Surveys – this also relates to question 12
- 3 Public Communications – this also relates to question 14
- 6 Prevention is Better Than Cure
- 7 Informed Choices
- 8 Guidance on Materials
- 9 Definition of Potholes
- 10 Permanent Repairs Policy
- 11 Inspection and Training
- 12 Technology
- 13 Guidance on Repair Techniques
- 15 Coordinating Street Works – this also relates to question 20

A Level 1 authority has made no progress in implementing the recommendations of the Potholes Review.

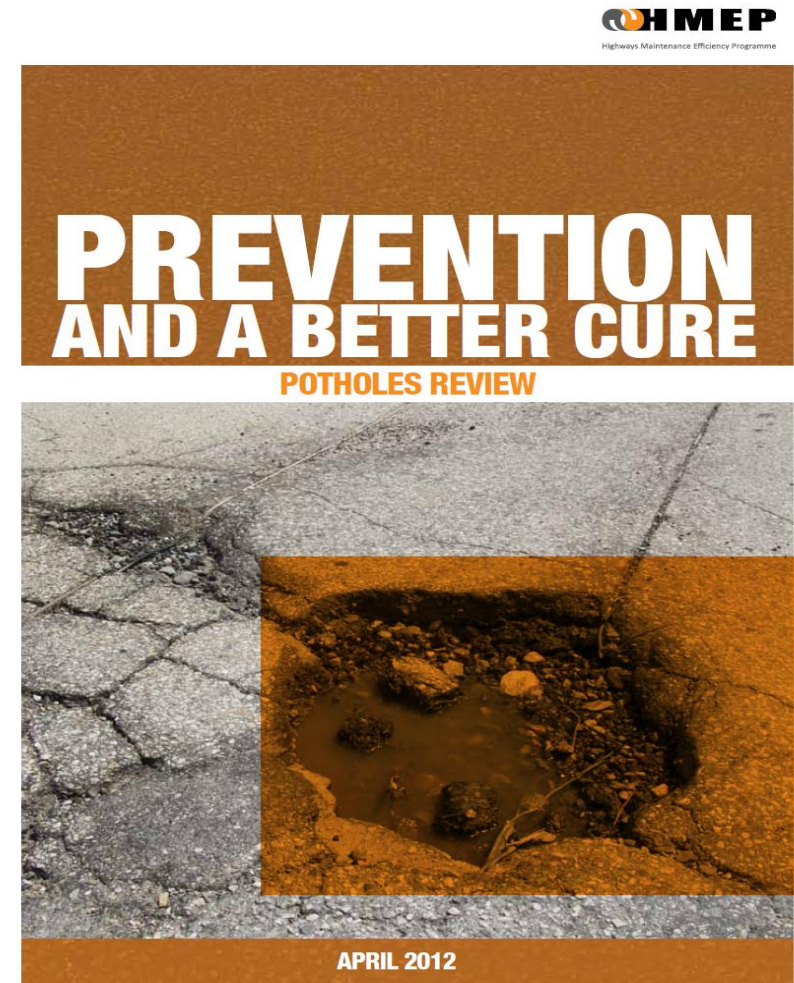
A Level 2 authority has adopted all 10 of the above recommendations and has evidence to demonstrate this.

A Level 3 authority has implemented all 10 of the above recommendations and can demonstrate year-on-year measurable improvement in performance as a consequence.

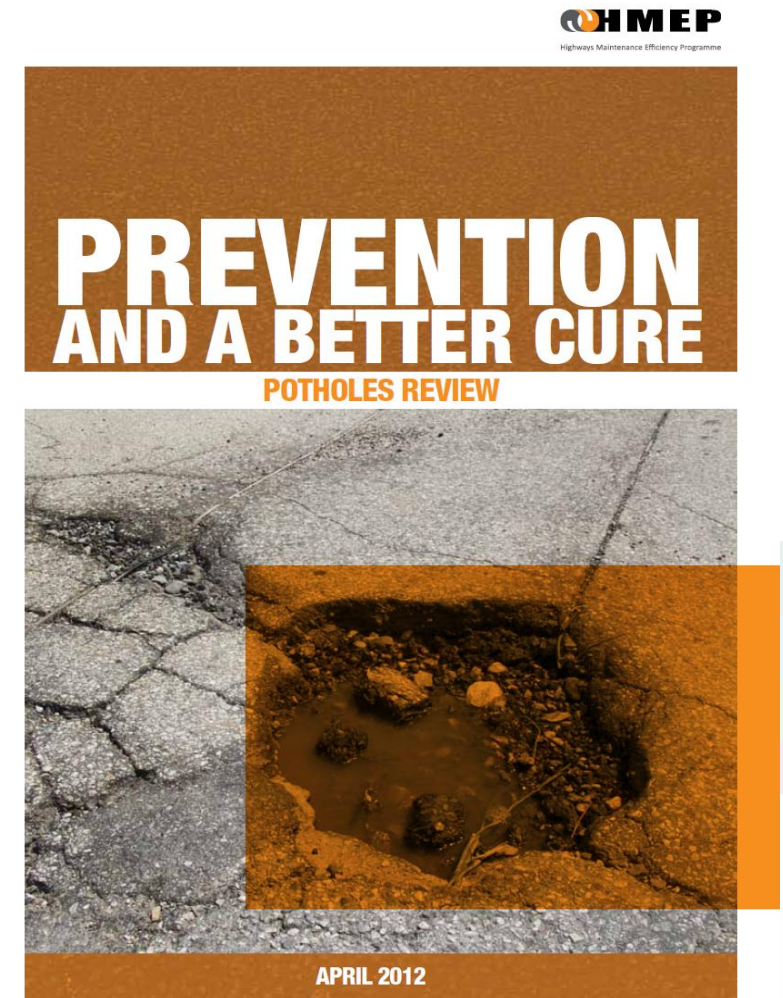
Resource: [Potholes Review: Prevention and a Better Cure](#)

The Key Recommendations

- **Prevention is better than cure** – intervening at the right time will reduce the amount of potholes forming and prevent bigger problems later.
- **Right first time** – do it once and get it right, rather than face continuous bills. Guidance, knowledge and workmanship are the enablers to this.
- **Clarity to the public** – local highway authorities need to communicate to the public what is being done and how it is being done.



- **17 recommendations**
 - 10 specifically relating to Local Highway Authorities
- **Backed up by 24 case studies in the document**
- **Supported by further supplementary information**
 - **Details from the case studies**
 - **Technical notes**
 - **Information on the relevant guidance documents**
 - **Information on relevant research projects**
 - **Details of National Highway Sector Schemes (NHSS)**
 - **Details or relevant Highway Authorities Product Approval Scheme (HAPAS)**



11. Has your local authority implemented the relevant recommendations of the 2012 HMEP Guidance on the Management of Highway Drainage Assets?

Level	Specific description	Evidence
1	<p>The 11 recommendations in the Guidance for authorities have not been implemented.</p> <p>or</p> <p>There is an intention to implement recommendations but limited progress has been made.</p>	None
2	<p>A review of current practice against the recommendations of the Guidance has been undertaken. Where the practice doesn't reflect the Guidance a prioritised action plan has been produced. As there may be a need for changes to policy and investment a report has been produced to secure sign-off by the Executive.</p>	<p>A review of current practice against the Guidance.</p> <p>An action plan if required.</p> <p>A report to the Executive on the proposed policy changes if required and the investment needed to implement them.</p>
3	<p>The Guidance has been adopted and the recommendations implemented. There are measurable improvements in managing drainage on the network, for example:</p> <ul style="list-style-type: none"> • Fewer flooding incidents. • A reduction in accidents as a consequence of flooding. • A reduction in the number of properties flooded adjacent to the highway as a consequence of highway run-off. • An improvement in the management of delays and disruption caused by roads blocked as a result of flooding. • A significant increase in gully cleansing, specifically targeted at those gullies that have been identified as being most likely to lead to flooding if not well maintained. 	Improvements in the performance of measures related to flooding.

- | | | |
|--|---|--|
| | <ul style="list-style-type: none">• All relevant flooding incidents investigated appropriately. | |
|--|---|--|

Has your local authority implemented the relevant recommendations of the 2012 HMEP Guidance on the Management of Highway Drainage Assets?

The HMEP Guidance on the management of Highway Drainage Assets was published in 2012 and was produced as a consequence of the increasing frequency of flooding events in the UK over the last 10 years. The Guidance also relates to The Flood and Water Management Act, which requires upper tier authorities to have new responsibilities in relation to flood risk management. The Drainage Guidance also supplements the HMEP/UKRLG Highway infrastructure Asset Management Guidance.

A Level 1 authority has not made any progress in adopting the 11 Recommendations in the Guidance.

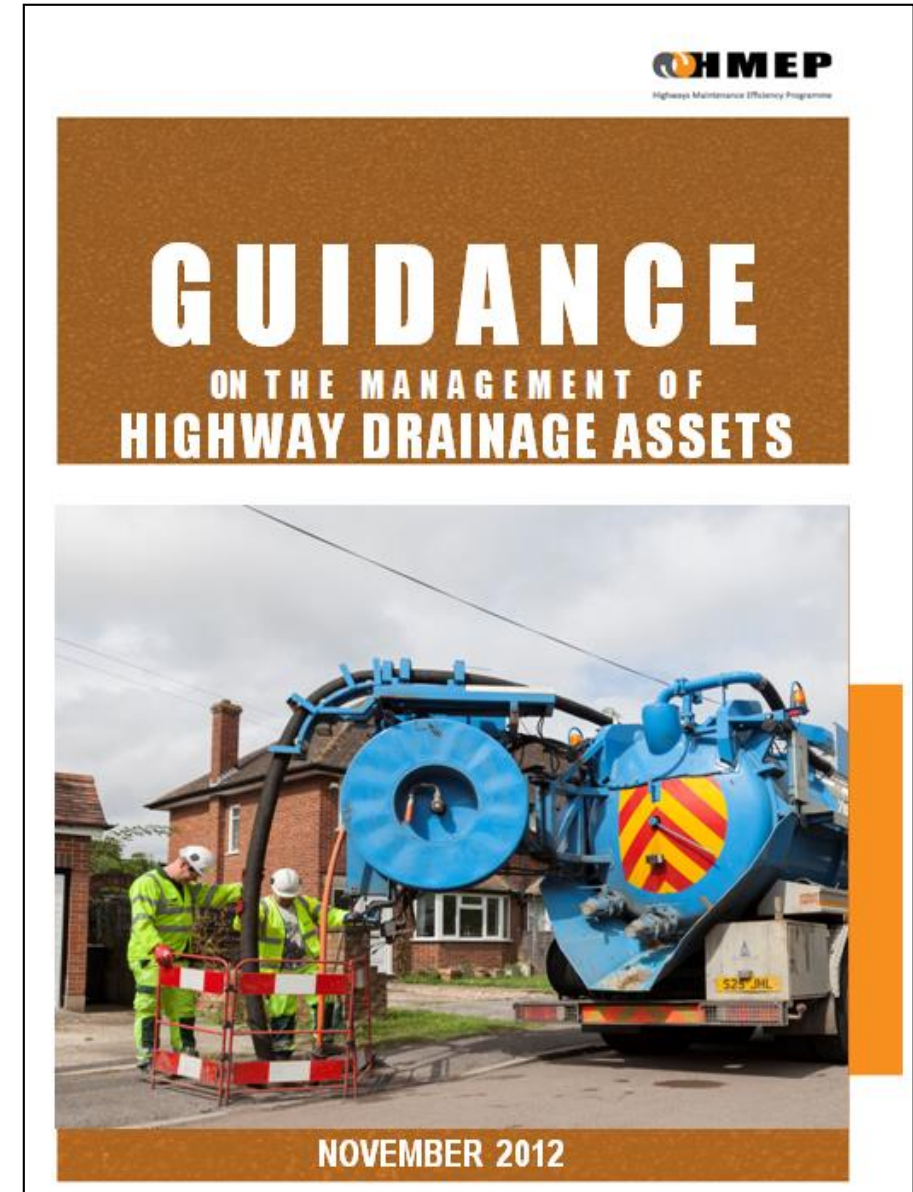
A Level 2 authority has assessed its current practice against all of the 11 Recommendations relevant to local authorities, and has evidence to demonstrate this.

A Level 3 authority, has adopted and implemented all 11 Recommendations in the Guidance, and can show clear measureable improvement in performance as a consequence.

Resource: [Guidance on the Management of Highways Drainage Assets](#)

Guidance for Local Authorities to:

- Give them a better understanding of efficiencies obtainable from using an asset management approach to drainage assets
- Reduce the unit costs of drainage maintenance
- Make better use of their drainage assets
- Provide a standardised approach to managing drainage assets, avoiding unnecessary expenditure on detailed surveys



Scheme Prioritisation Matrix Example (Cornwall CC)

Criteria for consideration

- Hierarchy
- Safety Issues
- Incidence of flooding
- Structural effects
- Traffic Speed



Scheme Prioritisation Matrix Example (Cornwall CC)

Safety (35% weighting):

Safety Classification	Accident history attributable to standing or running water on the carriageway	Standing or running water likely to cause an accident	Other minor safety issues	No safety issues
Score	100	75	25	0

Safety score = 26.25

Incidence of flooding (25% weighting):

Description	Frequent occurrence affecting more than one property	Frequent occurrence affecting a single property	Occasional occurrence affecting multiple properties	Occasional occurrence affecting a single property	No flooding to property
Score	100	90	60	50	0

Flooding score = 0

Scheme Prioritisation Matrix Example (Cornwall CC)

Result:

Scheme score: $11.25+26.25+0+5+15 = \underline{57.5}$

Additional consideration could be given to maintainability issues and the potential of a scheme to eliminate costly maintenance to the existing drainage system

The scheme is then ranked alongside others, which have undergone a similar scoring exercise and those that score the highest become eligible for funding in the planned financial period.

Those not immediately eligible are rolled forward to the next period but may be superseded by higher scoring schemes.

Drainage Scheme Programme

Final programme.xls [Compatibility Mode] - Microsoft Excel

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L1 FRC<32

	A	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
	Scheme R	NSA	rad design	Location	Easting	Northin	Road	Hier	W/flood sp	FRC<32	CDA	Comment & (bracket = YG comm	Estimate	HSA A4	A8	
1	DR01	5	RB	Rose Hill St Blazey Phase 1	206558	53976		2a/b		20	Y	Additional gullies required - Middlewa	25,000	80.3		
2	DR02	1	JHJ	Belyars Lane, St Ives - Phase 2	161795	39897			N	8	Y	Depending on result of phase 1 easen	45,000	80.8		
3	DR03	5	TBC	Tregrehan Trash screen flow routing	205254	53223	A390		FSE096 & 7	?		(EA & Eviron Service contribution) T	50,000	77.5		
4	DR04	3	JHJ	Moresk Truro	182943	45170				1	Y	Clean, survey, consider revie of maint	10,000	77		
5	DR05	5	RB	Higher Bugle stenalease (trench INCORP DR23 &	201487	57786		2a/b				reprofiling and addition drainage - hi	80,000	75.3		
6	DR06	5	RB	Halloon	191170	59791		2a/b				Installation of new filter drain	20,000	75		
7	DR07	7	RB	A390 Callington Newbridge	234855	67966	A390	2b	FSE033			Carry Over but requires some investid	30,000	70		
8	DR08	4	RB	A3058 Long Lane St Stephen	195758	53048	A3058					Phase 2 of Tregasgoe scheme	15,000	70		
9	DR09	5	RB	Mill Garage, Pentewan	20641	47210	B3276	3a	(FSE073)		?	On 2010-2011 - needs carry over - legal	5,000	70		
10	DR10	5	RB	Par Lane	207044	53682		4a/b	(FSE012)	20	Y	Additional gullies near Fourlords junc	15,000	69		
11	DR78	2	JHJ	Ting Tang	173172	40859	B3298	3a				Additional & revised drainage layout t	10,000	69		
12	DR11	5	RB	Mount Charles Rdbt	202949	52376		2a/b	(FSE088)	4	Y	Re build existing connection into leat	10,000	67.8		
13	DR12	5	RB	A3058 Trewoon Bridge	199414	52758	A3058			4	Y	Aliviate flooding under bridge	15,000	67.8		
14	DR13	3	JHJ	Brill (Homelands)	172560	29805						5 new gullies to push water into drain	10,000	66.5		
15	DR14	3	JHJ	Alexandra Road Illogan	186364	43714		4a/b				Additional piped drainage	10,000	66.5		
16	DR15	3	JHJ	Fidlers Elbow St Newlyn East	182343	55389						Additional gullies into existing system	15,000	66.5		
17	DR16	5	RB	Tregorrick/ Pentewan Rd	201260	51160						Additional drainage into existing syste	15,000	66.5		
18	DR79	3	JHJ	Knoll Ladock	189070	49760	B3275	2a/b	on Yuln B road			New gullies (site replaces Morlaix)	25,000	66.5		
19	DR17	3	JHJ	Bolinger Bridge Cottage	176463	53278	Uncl		FSS064	(16)		Pipe renewal and de-silt of water cour	10,000	64.5		
20	DR18	3	JHJ	Tresoath Rd Penryn	178029	34859				15	Y	Easement land owner non responsive	8,000	64.5		
21	DR19	5	RB	Wesley close stenalees	201586	57235		4a/b				Flooding in estate	10,000	64.5		
22	DR21	7	RB	Venterdon/ Stokeclimsland	35811	74727	Uncl	4a				Replace section of defective system	10,000	63.3		
23	DR22	4	RB	A390 The Mews St Blazey	206871	54957	A390			20	Y	Gatic line to capture water	10,000	60.8		
24	DR23	5	RB	Higher Bugle (Cowbourn) MERGED WITH DR05	201486	57777	A391			?		Capture run off to prevent flooding of	20,000	60.3		
25	DR25	4	RB	Bank Street, St Columb Major	191351	63647	C0727	3b				continuation of previous scheme - 20	20,000	62		
26	DR26	4	RB	Gonvenna Hill, Wadebridge	199405	72777	C0758	3a		11	Y	replacement of bubble up arrangement	10,000	62		
27	DR27	5	RB	Tregrehan roads	204644	53623		3a/b	(FSE096 & 7)	4	Y	Additional gullies on existing line	10,000	62		
28	DR28	7	RB	wenfordbridge /Gam Bridge Tuckingmill/fentondale	208713	77849	C0141	4a	(FSE048)			From poems - flooding on highway / p	10,000	62		
29	DR29	4	RB	A389 Trehellas, Washaway	203292	70382	A389	2a	FSE053			Defective system (as previous nomin	15,000	61.5		
30	DR31	3	JHJ	Carnsew	176439	34785	C & A					Renewal of filter drain Carried over fro	5,000	61.3	LTP07	T205
31	DR32	3	JHJ	A390 Probus - Grampond Extended scheme - rev	191590	48547	A390					Renewal of filter drain	10,000	60.3		
32	DR33	3	JHJ	A390 Grampond - Hewas Water INCORP WITH DR	194931	48717	A390					Renewal of filter drain	20,000	60.3		
33	DR34	5	RB	Drummers Hill / B3274	200916	54808		3a/b	(FSE086)			Upgrade outfall possible legal issues	10,000	60.3		
34	DR35	1	JHJ	Cathebedron Lane	161998	36845			FSW017			Possible Regional budget scheme M	50,000	59.5		
35	DR36	1	JHJ	Trewellard Hill	138242	33440						Road crossing and soakaway-holding	8,000	59.5		
36	DR37	5	RB	Carpalla farm	196538	53777						requires investigation possible PROV	10,000	59		
37	DR39	4	RB	Prince Park, Dernelza	197940	64660	C0118	4b				Repair defective system - 5k?	5,000	56.5		
38	DR40	4	RB	Trevanger, St Minver	196078	77439	U6133	4b				Defective system - 15k?	15,000	56.5		
39	DR41	2	JHJ	Retanna Hill - renew filter drain	171476	32751						Silted French drain needs excavation	15,000	56.3		
40	DR42	4	RB	A389 Sladesbridge	201315	71364	U0424	4b	FSE052	11	Y	Replace section of defective system	15,000	55.3		
41	DR81	1	JHJ	Wharf Road Penzance	147518	30261	C730	3a		6	Y	Repair & replace section of defectiv	6,000	54.5		
42	DR43	5	RB/EA?	Pentewan Square	201918	47242	C473	3b				NRV on highway culvert (asset nomin	5,000	54.5		
43	DR44	2	JHJ	Laflouder Fields, Mullion	167543	19035						Road floods and outfall needs upgrad	10,000	54.5		
44	DR45	4	RB	Ferleigh Road, Wadebridge	199238	71972	U6124	4b		11	Y	Install additional gullies	5,000	54.5		
45	DR46	5	RB	Polmassick	197153	45391		3a/b				Flooding of multiple properties: Prop	20,000	54.5		
46	DR47	1	JHJ	Kerris	145410	27414	Uncl					Water ponding in low spot - suggest s	5,000	54		
47	DR48	1	JHJ	Trevaylor, near farm	146807	32630						Possible new outfall	10,000	52.3		
48	DR49	3	JHJ	Mylor Boatyard	180650	35790						Continuation of old scheme	15,000	51.5		
49	DR50	5	RB	Southdown Road Sticker	197888	50303	U6102					Additional gullies on existing line	5,000	52		
50	DR51	1	JHJ	Polmeare Road, Penzance IMP to resolve with	147297	31334				6	Y	Following investigation now passed t	?	52		

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Ready 65%

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Highways Maintenance Efficiency Programme



THANK YOU
ANY QUESTIONS

