

Transport Asset Management Plan

Data Refresh - December 2017

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Transport Asset Management Plan – Data Refresh December 2017

Executive Summary

The Transport Asset Management Plan 2015-2030 (TAMP) was approved by the Cabinet Member for Highways and Transport on 10 June 2014 and identifies the key strategic priorities of the County Council, as the highway authority for Lancashire, during the period 2015/16 to 2029/30.

This document provides an update of the changes that have occurred both nationally within the highway sector since the original TAMP was approved and locally within Lancashire. This document also provides us with an opportunity to report the latest condition of our assets so that our performance over the past 12 months can be measured and scrutinised.

This data refresh is intended to supplement both the original TAMP and previous years refresh documents rather than replace them, so that when these documents are read together they provide an up to date and ongoing analysis of the current condition of our transport assets and detailed information of any new pressures we are facing.

In addition, the annual data process enables the County Council to include information about those transport assets that were not included in the TAMP but for which further information is now

available or highlight any changes that are proposed for data capture as a result of using new technology etc.

Since the last data refresh in June 2016 the County Council completed the annual self-assessment questionnaire and assessed its performance against Department for Transport (DfT) criteria. As a result of this exercise which took place in January 2017, the county council now considers itself to be a Band 3 authority in terms of Highway Asset Management. As a result, the County Council has received 100% of its 2017/18 Incentive Fund allocation. Authorities in Band 1 or 2 only received part of their Incentive Fund allocation.

Good progress has been made over the past 12 months with the condition of A, B & C roads continuing to improve and less defects and claims on footways, however the overall condition of our transport assets has fallen from 2.57 to 2.22, but overall is still regarded as being ACCEPTABLE.

The main reason for this is the deterioration of the unclassified road network which was anticipated in original TAMP strategy. In respect of these roads we will continue focus on preventative maintenance with key safety defects being addressed so that the network can be maintained to the best condition possible until they become our main focus in phase 2, commencing April 2020.

The table below sets out the TAMP Service Standards, the 2013 baseline condition data and subsequent years condition data.

Asset Category	Measure	Current Service Standard					Asset Condition			
		POOR	ACCEPTABLE	FAIR	GOOD	EXCELLENT	2013/14	2014/15	2015/16	2016/17
A Roads	% RED / AMBER	>25%	25 - 16%	15 - 11%	10 - 6%	≤5%	22.1%	30.37%	23.72%	21.75%
B Roads		>40%	40 - 21%	20 - 16%	15 - 6%	≤5%	42.3%	36.01%	28.10%	26.27%
C Roads		>50%	50 - 31%	30 - 21%	20 - 11%	≤10%	48.7%	38.59%	30.62%	30.65%
Residential Unclassified Roads	% RED / AMBER	>50%	50 - 31%	30 - 21%	20 - 11%	≤10%	Not Collected	Not Collected	Not Collected	Collected being analysed ¹
Rural Unclassified Roads	% RED / AMBER	>50%	50 - 31%	30 - 21%	20 - 11%	≤10%	Not Collected	Not Collected	Not Collected	Collected being analysed ¹
Footways	No. defects	>50,000	50,000 - 40,000	40,000-15,000	15,000-10,000	<10,000	51,395 ²	22,171 ²	13,533 ²	13,037 ²
	No. claims	>600	500-400	400-250	250-150	<150	359	298	259	130
Bridges and Similar Structures	Bridge Condition Index (Ave.)	<40	40-60	60-79	80-90	>90	89.3	89.99	90.19	89.75
Street Lighting	% of high risk installations	>35%	25-35%	20-25%	10-20%	5-10%	23.15%	17.72% ³	19.99% ³	16.15% ³
Traffic Signals	% of units beyond design life	>40%	30-40%	20-30	10-20	<10%	33.11%	33.11	30.31	30.31

1- Condition data is being collected for the unclassified network using Detailed Video Survey methodology for unclassified roads. Analysis currently being undertaken and will be reported as part of the 2018 data refresh. Provisional data shows that the unclassified road network is POOR compared to the C road network
2- Changes in defect reporting systems for footways meant 2013 data is not comparable to subsequent year's data. Detailed Video Survey data for footways is available
3- Data cleansing means that 2013 & 2014 data not directly comparable with subsequent years data for Street Lighting

From this it can be seen that:

- Between 2014 and 2017 the average % of RED or AMBER on A roads reduced by 28% (67km), B roads reduced by 45% (99km) and C roads reduced by 37% (267km). The overall the condition of our A and B roads can be regarded as ACCEPTABLE and the overall the condition of our C roads can be regarded as FAIR
- The overall condition of Footways as measured by defects has improved from GOOD to EXCELLENT
- The overall condition of Bridges and Similar Structures deteriorated slightly from marginally EXCELLENT to GOOD
- The overall condition of Street Lighting improved from FAIR to GOOD

1) Introduction

The Transport Asset Management Plan (TAMP) was approved by the Cabinet Member for Highways and Transport on 10 June 2014 and sets out how the County Council intends to manage its transport assets over the 15 year period from 2015/16 to 2029/30.

In order that the TAMP can remain a live and current document it is intended to provide annual updates which contain additional information to supplement the TAMP. It is intended that these updates will provide a summary of external pressures within the highway sector and internal initiatives that will impact of the County Council's highway and transport asset network. This update includes information relating to:-

- DfT Self-Assessment Questionnaire,
- Changes to Highway Asset Management Governance,
- New Service Standards
- Revised asset condition data,

2) DfT Self-Assessment Questionnaire

As mentioned in the last TAMP refresh, in order to encourage local authorities to adopt good asset management practices across England, the DfT has introduced changes to the highway maintenance formula funding mechanism. As a result each authority will now be required to undertake a self-assessment against a set of criteria aimed at assessing performance in relation to asset management, resilience, customer, benchmarking and efficiency and operational delivery.

Our assessment was validated by the County Council's s151 officer and submitted to the DfT in January 2017. As a result of this exercise, the County Council assessed itself to be a Band 3 authority.

Should the County Council not consider itself to a Band 3 authority when the next self-assessment exercise takes place in January 2018, it will only receive part of its Incentive Fund allocation in 2018/19. Details of the 'incentive bands' and funding % for future years are shown below:-

Year	Band 1	Band 2	Band 3
2018/19	30%	70%	100%
2019/20	10%	50%	100%
2020/21	10%	30%	100%

It is important therefore that we continue to maintain Band 3 assessment criteria requirements in order to provide the best possible highway service.

Given the reductions in highway funding over the past few years and the future financial challenges the County Council is facing it is imperative that we retain our 'Band 3' status for the foreseeable future. From DfT guidance it is vital that local authorities have the support of members, senior officers and a good quality TAMP in place that is refreshed and updated on a regular basis.

A summary of self-assessment questions, areas covered and our January 2016 and 2017 scores are shown below:-

	Area Assessed	2016	2017
1	Asset Management Policy and Strategy	3	3
2	Communications	2	3
3	Performance Management Framework	2	3
4	Asset Data Management	2	3
5	Lifecycle Planning	2	2
6	Leadership and Commitment	2	3
7	Competencies and Training	1	3
8	Risk Management	2	3
	Resilience		
9	Resilient Network	2	3
10	Implemented Potholes Review	2	3
11	Implemented the Drainage Guidance	2	3
	Customer		
12	Satisfaction	2	3
13	Feedback	2	3
14	Information	2	3
	Benchmarking and Efficiency		
15	Benchmarking	2	3
16	Efficiency Monitoring	2	3
	Operational Service Delivery		
17	Periodic Review of Operational Service Delivery	2	3
18	Supply Chain Collaboration	2	3
19	Lean Reviews	2	3
20	Works Programming	2	2
21	Collaborative Working	2	3
22	Procuring External Highway Maintenance Services	2	3

The final banding is calculated according to the following guidelines:-

Band 1	Does not reach Level 2 or Level 3 in at least 15 of the 22 questions
Band 2	Must reach Level 2 or Level 3 in at least 15 of the 22 questions.
Band 3	Must reach Level 3 in at least 18 of the 22 questions

In addition if an authority scores 1 in any or all of questions 1, 2 and 5, they will automatically be placed in Band 1 overall, regardless of their other scores. A summary of LCC's 22 scores is provided below:-

	2016	2017
Level 1	1	0
Level 2	20	2
Level 3	1	20
Overall Band	2	3

As a result the scores and guidelines the County Council has assessed itself to be a Band 3 authority as a result of improvements to highway asset management governance across a number of key areas.

One of the key fundamentals of the self-assessment is that asset management principles have been embedded across the whole organisation.

In order to achieve this the Highways Infrastructure Asset Management Strategy Board (HIAMSB), whose membership comprises of Directors and Heads of Service from Corporate Commissioning, Community Services, Programmes and Project Management, Highways, Design and Construction and Asset Management, meets on a regular basis to review various aspects of highway asset management and performance to ensure that the principles contained in the Highways Management Plan (HMP) are implemented consistently throughout the organisation.

The HIAMSB not only provides a governance role but also monitors performance and ensures progress in the strategic direction outlined within the TAMP and the HMP are maintained. In addition the Board oversees the annual completion of the DfT Self-Assessment questionnaire which determines the Incentive Element of funding for all English highway authorities dependent upon their banding.

In addition the Highways Asset Manager has briefed members of the Scrutiny Committee on a number of occasions in recent years to provide an update on our performance in respect of maintaining our Transport Assets as part of the TAMP data refresh process and to advise on the changes and pressures affecting highway maintenance in Lancashire. The Highways Asset Manager has also previously given presentations to various key individuals and teams in order to inform them of the changes that the County Council needs to make in order that it can improve its performance. As a result of our new developments, strategies.

plans and progress over the last 12 months additional presentations are now being proposed to update key individuals and teams on recent developments with regards new strategies and codes of practice.

A TAMP scrutiny workshop took place in September to engage with County and District Councilors on the principles of the TAMP and scheme prioritisation.

3) Changes to Highway Asset Management Governance

In our drive to achieve Band 3, the County Council has created a web-page specifically for Highways Asset Management will enable new developments to be accessed by both internal and external stakeholders. This can be found at:-

<http://www.lancashire.gov.uk/council/strategies-policies-plans/roads-parking-and-travel/highway-asset-management-in-lancashire.aspx>

Whilst still in its infancy, the webpage contains information relating to a number of new policies and codes of practice that have been approved, namely:-

Highways Asset Management Framework

An overarching document that provides a framework for highway asset management in Lancashire.

Highway Asset Communication Strategy

Covering both the delivery of highway maintenance service and the asset information and decision making.

Street Lighting, Carriageway Lifecycle and Structures Lifecycle Plans

Lifecycle planning is an important aspect of highway asset management and involves drawing up long-term plans for managing an asset grouping with the aim of providing the required levels of service at the lowest whole life cost.

Highway Asset Information Strategy

The Highways Asset Information Strategy has been developed to ensure reliable information on the type, number and condition of assets and sufficient quality data for lifecycle planning and maintenance options, scheme selection and works prioritisation.

Resilient Route Network

The resilient route network are those roads designated a high priority to maintaining economic activity and access to key services and will 'Keep Lancashire moving' during extreme weather.

Code of Practice for the Maintenance and Cleaning of Road Gullies within the Adopted Highway

This code of practice sets out in detail a process of assessment by which decisions relating to work activities on vehicular highway

gullies should be made and is based upon current guidance on best practice

Code of Practice – Trash Screens

This code of practice sets out in detail a process for cleaning and attendance upon receipt of storm warning notifications.

In addition, the website contains links to the original TAMP, the 2015 and 2016 TAMP refresh documents, details of our proposed highway capital programme for the next three years and the Life in Lancashire surveys which provide customer feedback on a range of services.

Having approved the above the challenge is now to implement these into the way we undertake Highway Asset Management in Lancashire, hence the need to update key officers and teams in the area offices. Work is ongoing to develop and update a number of other codes of practice and strategies.

Highways Asset Management System (HAMS)

HAMS was installed in the latter part of 2016/17 and has recently been populated following the migration of data from a number of standalone or legacy software databases into one integrated programme.

The installation of HAMS will enable the County Council to make full use of both digital and Wi-Fi services and enable members of the general public to access services easier via the use of self

service options. It is anticipated that this change will enable efficiencies through:

- increased automation for both staff and customer interactions,
- eliminate double handling and input of data to multiple systems,
- maximise responsiveness and work on the ground through the use of mobile technology,
- the removal of duplication and our reliance on outdated paper based systems

HAMS is a fully integrated solution for the management of infrastructure, including land, highways, structures, public lighting, and distribution networks. It will allow relevant users to:

- record and map information related to schemes
- register and maintain assets and manage any defects
- provide real time information to both internal staff and members of the public
- drive prioritised asset management,

The system also provides a specific solution for the management of bridges, retaining walls, culverts, gantries and other similar structures. It will handle cyclic inspections and maintenance, including the seasonal variations in activities, through to condition projection and strategic asset planning. It will also make the best use of the latest mobile technology for working on site.

4) New Service Standards

A, B and C Road Network

The 2016 TAMP refresh document reported that as a result of highways works carried out in the preceding 12 months the condition of the A, B and C Road network had improved.

The annual SCANNER survey showed:-

- that the quantity of GREEN (no maintenance required) roads was 1,807km - an increase of 416km (30%) from 1,931km in 2014,
- All districts have seen an overall improvement in the condition of the A, B & C road network,
- The general improvement in the B & C road network has returned many roads in a number of districts to their 2009 condition,
- Between 2014 and 2016 the average % of GREEN on:-
 - A roads increased by 2.16%% (50.33km)
 - B roads increased by 3.92% (91.84km)
 - C roads increased by 14.95% (276.57km)
- Overall the A, B & C road network is regarded as being ACCEPTABLE

In order that the 5-year target set out in the TAMP can be met, it was important that further, challenging, interim standards for 2017/18 onwards were set so that resources can continue to be allocated on an objective basis. The table below shows progress to date and the March 2020 target set out in the TAMP.

Targets - Progress	% RED or AMBER
1 st Initial Target - set 2014	25% (A roads) 40% (B roads) 50% (C roads)
Assessed Position - May 2016	23% (A roads) 28% (B roads) 30% (C roads)
2 nd Initial Target 2017/18	15% (A roads) 20% (B roads) 25% (C roads)
TAMP target – March 2020	10% (A roads) 15% (B roads) 20% (C roads)

The setting of the 15-20-25 GREEN (15% A roads, 20% B roads, 25% C roads) Service Standard would allow the momentum of previous years to be maintained and ensure all Districts approach the March 2020 target equally.

Unclassified Roads Networks

Highway video surveys have recently been undertaken and work is ongoing with neighbouring authorities to ensure consistent interpretation of the data and development of service standards.

As a result there is now a better understanding of the rural and urban unclassified roads and this is being used to shape the investment strategy for phase 2 of the TAMP so that all the unclassified roads improve at the same rate.

Service standards will be set for these asset types once this analysis is complete.

Condition – Footway Network

Highway video surveys have recently been undertaken work is ongoing with neighbouring authorities to ensure consistent interpretation of the data and development of service standards.

In the meantime the number of defects and claims will continue to be used as a means of measuring levels of service.

5) Future Developments

Well Managed Highway Infrastructure: Code of Practice

This code of practice supersedes three separate codes of practice relating to highway, street lighting and structures. Whilst this new code is not statutory it provides highway authorities with guidance on highways management. Adoption of the recommendations within this document is a matter for each highway authority, based on their own legal interpretation, risks, needs and priorities. The thrust of the document is for highway huthorities to adopt a risk based approach to all aspects of highway management by October 2018. A gap analysis has already been undertaken and the Highway Infrastructure Asset Management Strategy Board is considering detailed proposed actions for implementation of the Code of Practice. The Code of Practice mirrors the good practice that DfT Self-Assessment criteria relate to in many aspects.

Highway Management Plan

A Highway Maintenance Plan was adopted by the county council in 2009 and covers many aspects of policy and procedure relating to maintaining the highway network. It is proposed to revise this plan to take on board the risk based approach advocated in the Well Managed Highway Infrastructure: Code of Practice. The Cabinet Member for Highways and Transport will be consulted throughout its development and it is anticipated that this will be presented to Cabinet for consideration early in 2018.

6) Revised Asset Condition Data

Much of the condition data contained in the Transport Asset Management Plan was compiled in the 18 month period prior to the TAMP approval in 2014 and was used to calculate the overall service standards at that time.

The condition data in the original TAMP is now updated and reported to members of the Scrutiny Committee on an annual basis. Comparing our latest condition data to the 2014 baseline data enables our current performance to be measured.

The following section provides a brief summary of the condition of each of the asset groups covered by the TAMP together with a summary of the main points arising out of our analysis of each group.

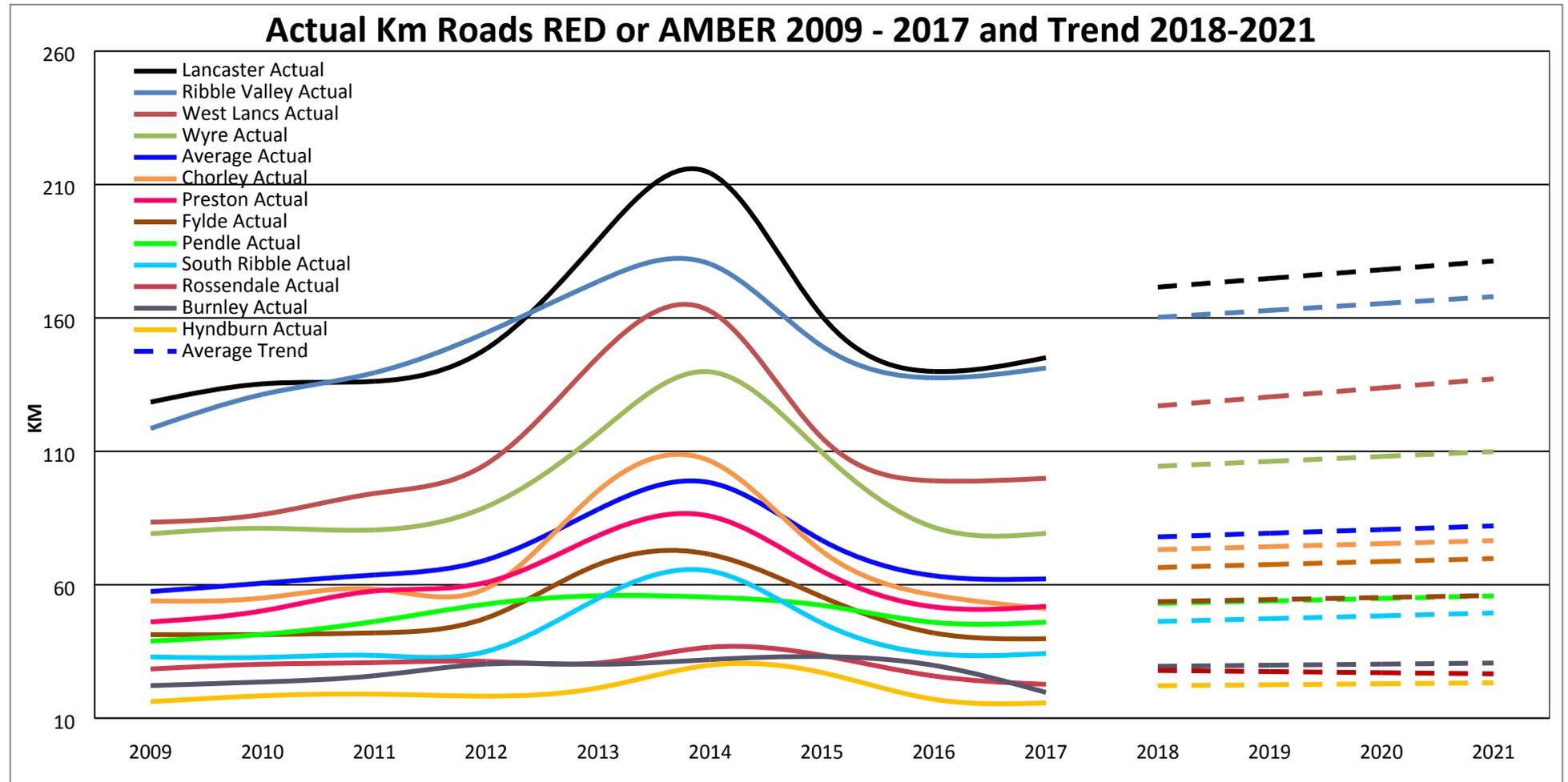
Each section follows a similar basic structure. Where possible graphs will show simultaneously 2014 and 2017 data. Where this isn't possible, two separate graphs will be provided to show the relative condition of the asset on a district by district basis for both years so that year on year comparisons can be made.

A summary is provided to outline the key facts relating to the category of the asset. Typically information presented includes:

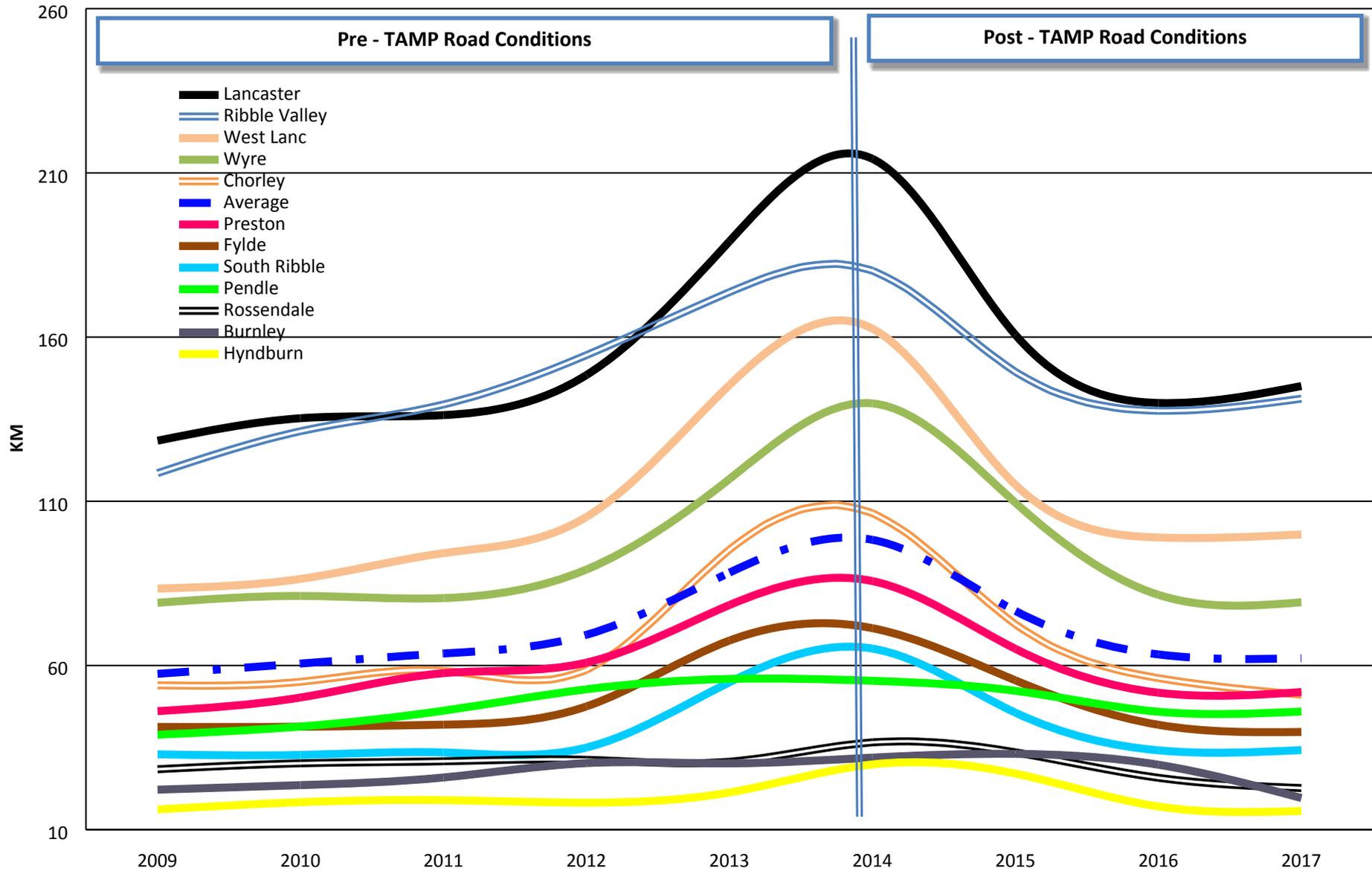
- How much of the asset the council is responsible for,
- How the condition of the asset is assessed,
- If there any gaps in the information currently held,
- The average condition of the asset in 2014 and 2017,
- How much financial resource has, on average, been available in recent years;

A, B and C Roads

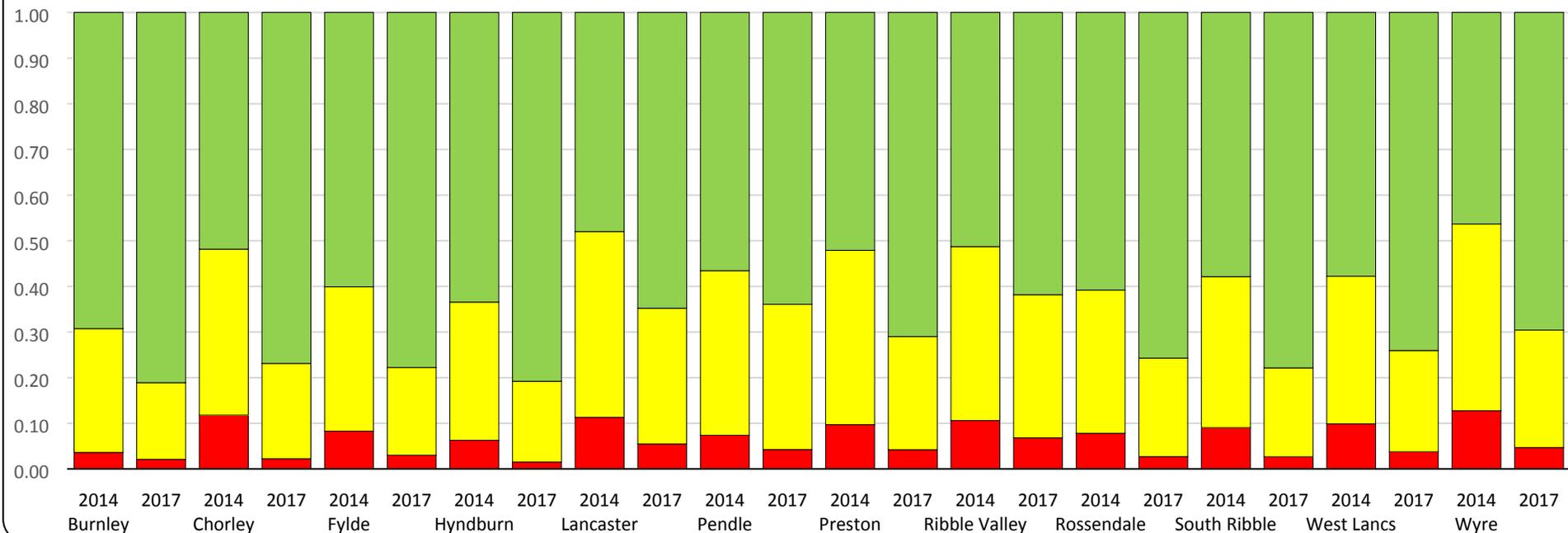
Most Cost Effective Strategy: Investment in preventative maintenance using appropriate surface treatments determined through deterioration modelling.



Actual Km A,B,C Roads RED or AMBER - 2009 to 2017



A,B & C Roads - % Red, Amber or Green 2014 v 2017



Summary

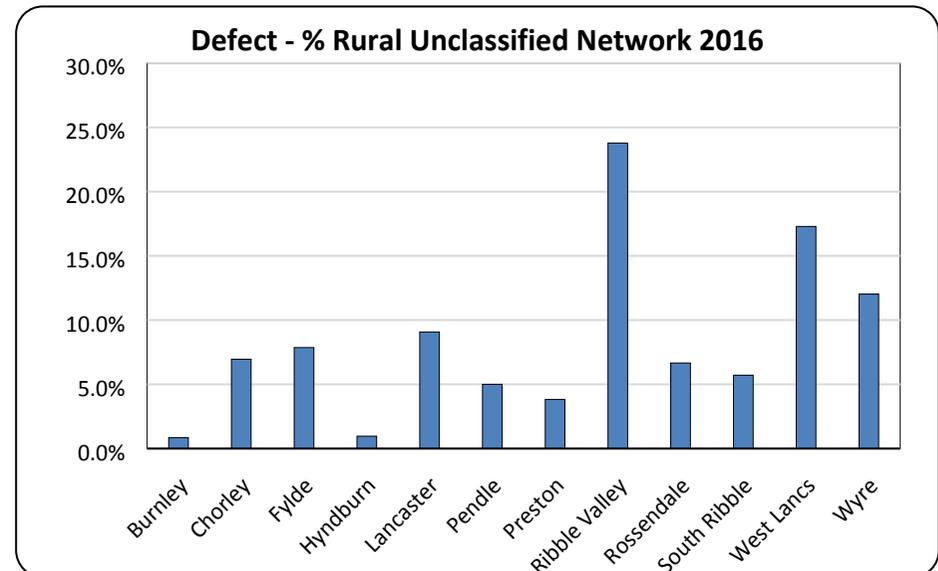
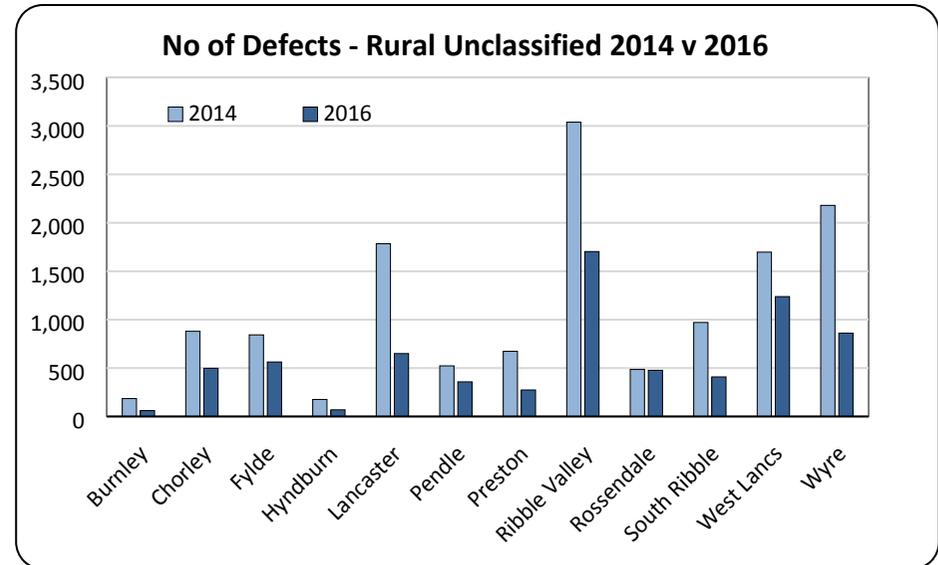
- The asset consists of a total of approx. 2,583km of highway,
- The length of A, B and C roads classified as RED or AMBER in 2014 was approximately 1,176 km. According to the May 2017 SCANNER survey the quantity of RED or AMBER has reduced from 1176km down to 746km, a reduction of 430 km (37%),
- According to SCANNER data the overall condition of the A, B and C road network in the districts of Burnley, Chorley, Fylde, Hyndburn and Rossendale are now better than their 2009 condition,
- Between 2014 and 2017 the average % of RED or AMBER on :-
 - A roads reduced by 28% (67km)
 - B roads reduced by 45% (99km)
 - C roads reduced by 37% (267km)
- Overall between 2014 and 2017 the average % of RED or AMBER on the A, B & C road network has reduced by 432km (36%)
- The A and B road network is currently regarded as being ACCEPTABLE, whilst the C road network should now be regarded as being FAIR.

Rural Unclassified Roads

Most Cost Effective Strategy: Investment in preventative maintenance which is based on appropriate surface treatment in preference to more costly resurfacing of roads.

Summary

- The asset consists of approximately 990 km.
- The current condition is indicated by the number of defects identified by highways inspections, as recorded in the Highway Defect Sort System (HDSS).
- Due to a change from EXOR to HDSS the defects in the original TAMP are not comparable to the latest figures.
- Overall there has been a reduction of approximately 6,000 (46%) critical safety defects on the rural unclassified road network between 2014/15 and 2016/17.
- There has not previously been survey data for the unclassified road network and the TAMP has always assumed that the condition of the unclassified road network mirrored that of the 'C' road. As a result of video survey works, analysis of the data is underway to be able to report actual condition in the next refresh. Current indication is that the rural network is considered POOR.
- Investment is based firstly on maintaining the current condition of the network as far as is practical and secondly, if investment levels are sufficient, to bring all district areas up to the same county standard.
- The asset is important to the rural economy and to rural communities.

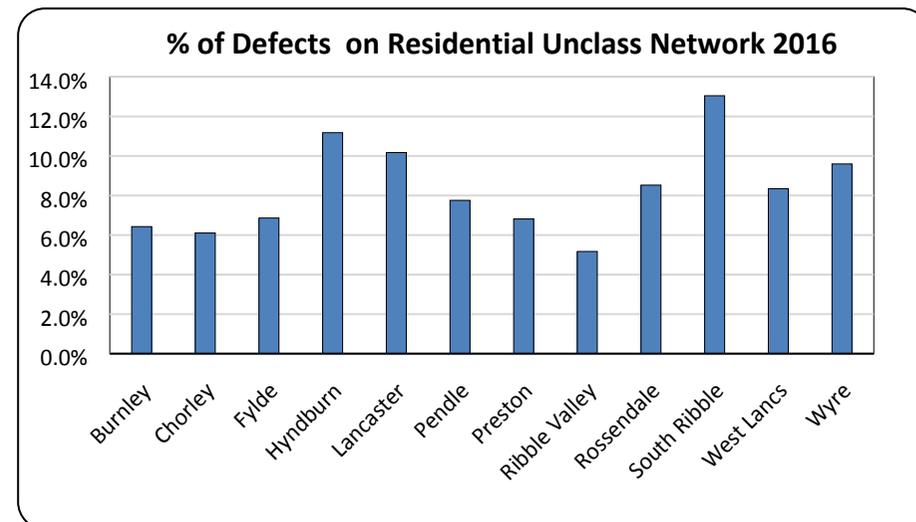
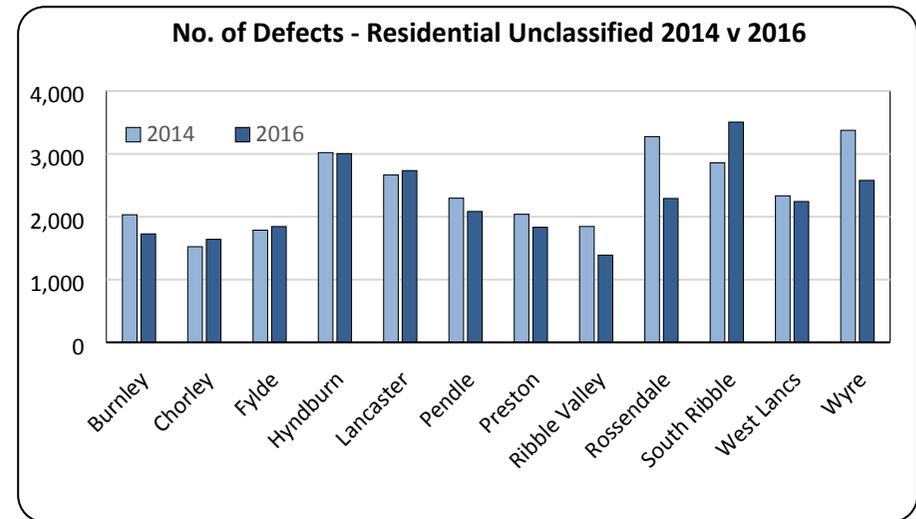


Residential Roads

Most Cost Effective Strategy: Investment in preventative maintenance which is based on appropriate surface treatment in preference to more costly resurfacing of roads.

Summary

- The asset includes approximately 3,130 km of residential roads.
- The current condition is indicated by the numbers of defects identified by highways inspections as recorded in the Highway Defect Sort System (HDSS). Due to a change of systems the 2013 defects numbers in the original TAMP are not comparable to the latest figures.
- Overall there has been a reduction of approximately 2,000 (7.5%) safety critical defects found on the rural unclassified road network between 2014/15 and 2016/17
- There has not previously been any survey data previously for the unclassified road network the TAMP has always assumed that the condition of the unclassified road network mirrored that of the 'C' road. As a result of video survey works, analysis of this data is underway and will enable the reporting of actual condition in the next refresh. Current indication is that the rural network is considered POOR.
- The estimated investment required to maintain the current rate of deterioration would be £5m per annum.
- Investment is based firstly on maintaining the current condition of the network as far as is practical.
- If resources allow, investment will then be based on bringing all districts to the county standard.

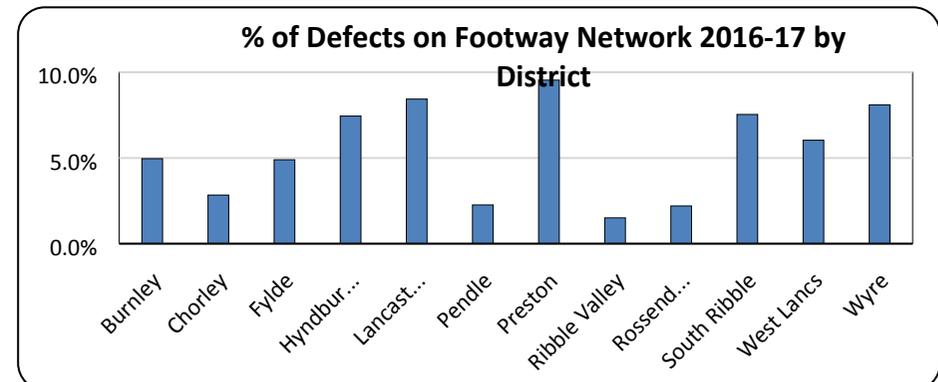
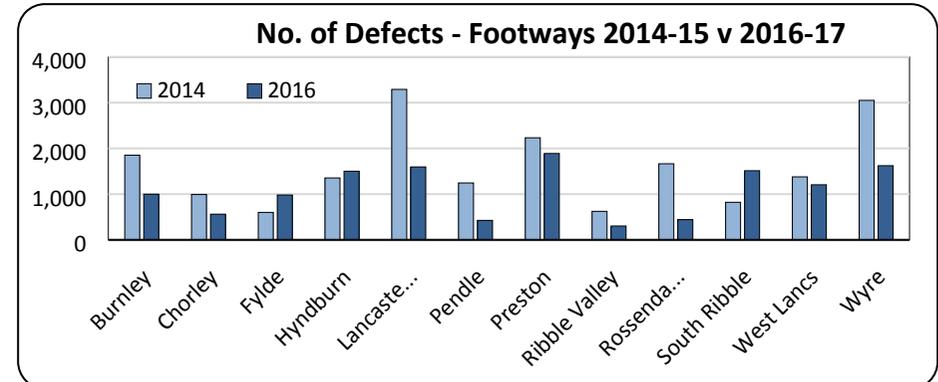
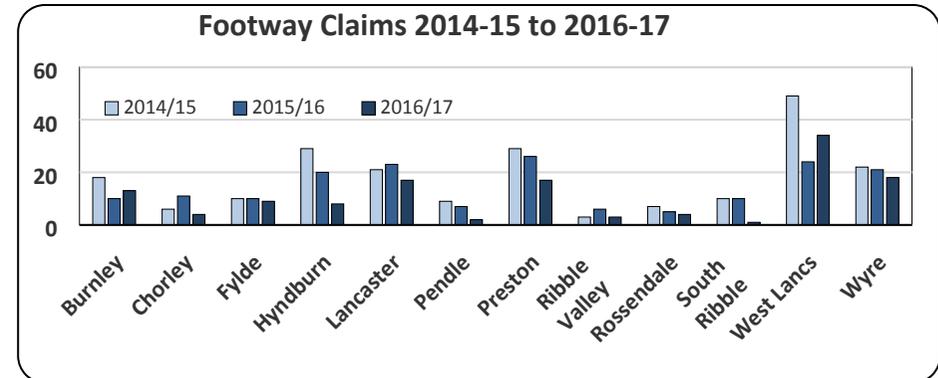


Footways

Most Cost Effective Strategy: Investment in preventative maintenance which is based on appropriate surface treatment in preference to more costly resurfacing of footways.

Summary

- There are over 8,500km of footways in Lancashire.
- The condition of this asset group has, in the absence of survey data, been determined by the number of defects detected on the footway network and the number of footway claims received.
- Using defect/claim numbers the current condition of the asset is assessed as being EXCELLENT.
- Condition data for the footway network has now been collected and detailed earlier in this refresh document.
- Due to a change of systems the 2013 stated in the TAMP are not comparable to the latest figures.
- Overall there are approximately 7,000 (34%) less defects on the footway network in 2016-17 compared to 2014-15.
- There has been a 39% fall (83 no) in the number of footway claims received between 2014-15 and 2015-16. The number of claims has fallen in all districts areas over the past 12 months apart from Burnley (3) and West Lancs. (10).
- The estimated capital investment required to maintain the current rate of deterioration would be £2.5m per annum.
- Investment is based firstly on maintaining the current condition of the network as far as is practical and secondly, if resources allow, on bringing all district areas to the same county standard.



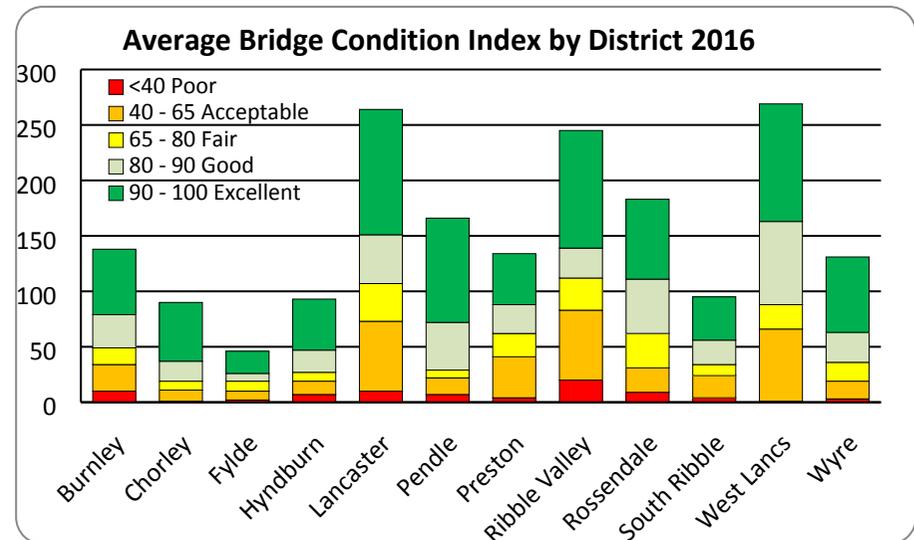
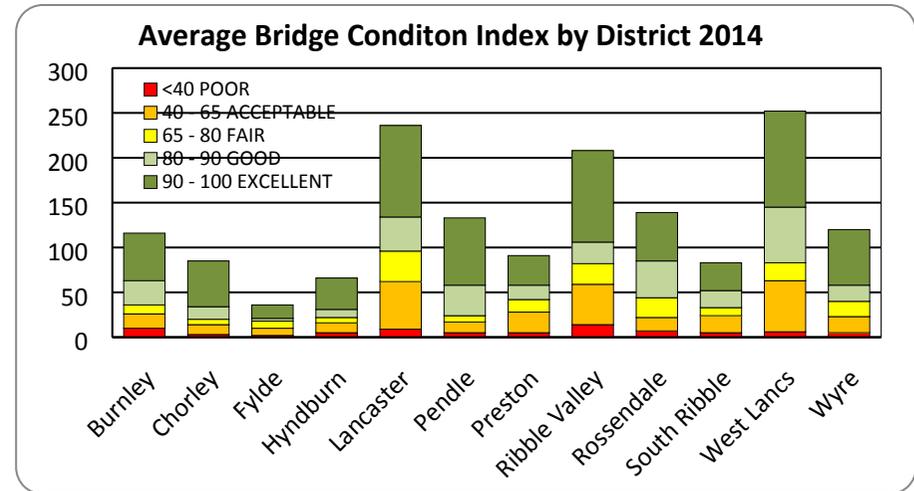
Bridges and Similar Structures

Most Cost Effective Strategy: Investment in preventative maintenance which is not based on reconstruction of bridges but is based on intervention at the most appropriate time

Summary

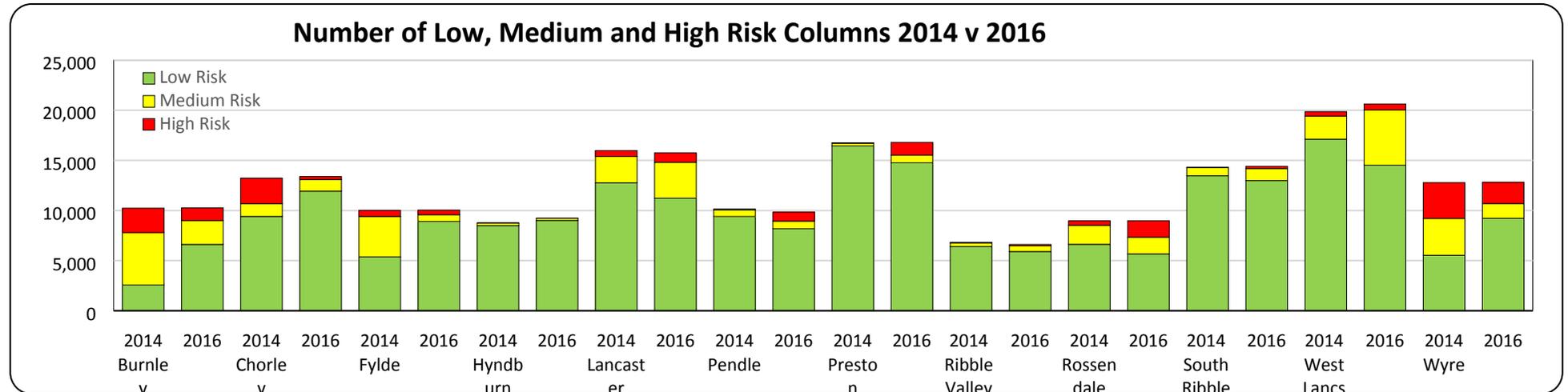
- There is good condition information relating to the condition of this asset grouping. The council is responsible for approximately 2,000 bridges and similar structures*,
- The average bridge condition index has improved from 89.3 in 2014 to 89.75 in April 2017, but fell slightly from 90.19% last year. The overall condition of this asset is regarded as GOOD.
- The average bridge condition is regarded as GOOD in Hyndburn, Preston, Ribble Valley, Rossendale, South Ribble and West Lancs. In all other district areas the average bridge condition is regarded as EXCELLENT.
- The investment strategy is based upon identifying bridges and similar structures which have a bridge condition index (critical or adjusted) of < 40**, and producing action plans for each such structure.
- Resources are allocated on the basis of need based on condition data

*Excludes maintenance of Network Rail bridges, major new projects or major refurbishments. **A bridge in poor condition does not necessarily require urgent remedial action and is not automatically at risk of failure or subject to load restrictions.



Street Lighting

Most Cost Effective Strategy: The risk to the public from a column falling over is generally low; however, half of our columns exceed the age when they should be regularly tested or considered for replacement or removal. The strategy is to reduce the likelihood of columns falling over by either replacing or removing the highest risk columns.

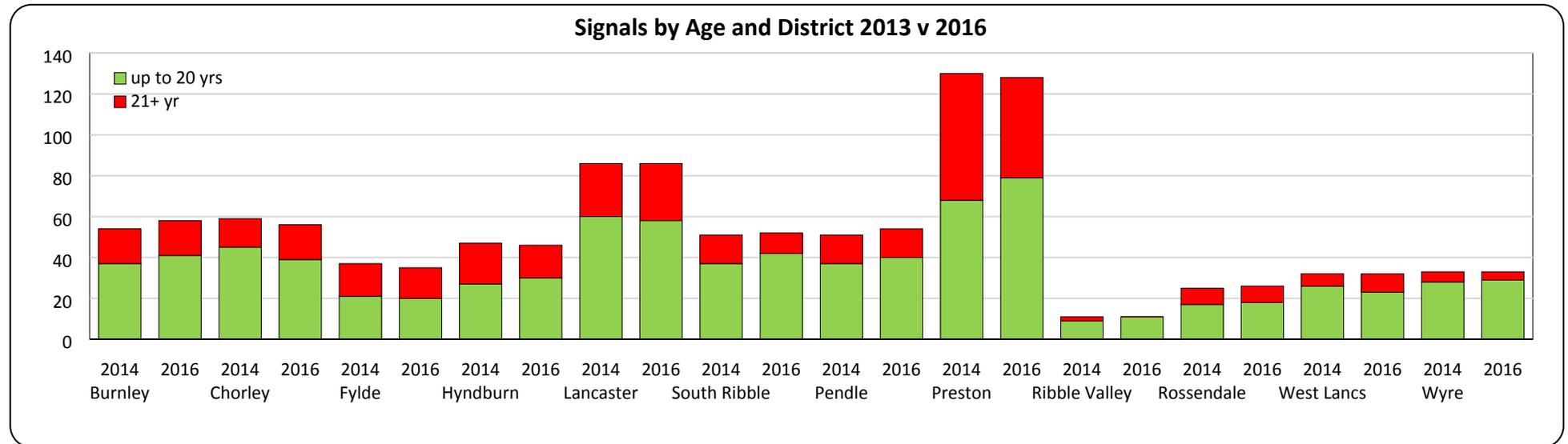


Summary

- The council is responsible for approximately 149,000 street lights and 17,600 illuminated signs, bollards and similar installations.
- The electricity cost for these items is in the region of £5.5m per annum,
- According to the risk assessment contained in the Institute of Lighting Professionals Technical Report 22 'Managing a Vital Asset' 55% of lighting columns have now exceeded their 'Action Age'.
- Approximately 16% of columns are classed as being either medium or high priority for replacement. The number of medium/high risk columns has reduced from 30,500 to 24,000 over the past 12 months, a reduction of almost 4%
- The current condition of the stock is considered to be GOOD.
- In order to maintain the current rate of deterioration of the stock, it is estimated that a capital investment of the order of £6m per annum would be required. The likely capital investment available for 2018/19 is £1m.
- Data cleansing has resulted in the ages of some columns being adjusted meaning that 2014 & 2015 data not strictly comparable

Traffic Signals

Most Cost Effective Strategy: Investment in preventative maintenance which is based on replacement of obsolete units at key junctions which will not be covered by Highways and Transport Masterplan activities.



Summary

- There are 614 sites in Lancashire which are controlled by traffic signal and/or pelican crossing installations.
- The condition of the stock is measured in terms of the age of installations which normally have a service life of 20 years before they reach a point where they are no longer supported by the manufacturer.
- There is a total of 187 installations (30% of the stock) more than 20 years old – which is a reduction of 17 installations (3%) from 2014.
- It is estimated that a replacement programme at a value of £0.5m per year would be required to replace the stock that is no longer supported by the manufacturer.
- A breakdown of traffic signal and pedestrian crossing equipment up to 20 years old (green) and age 21 years and over (red) and no longer supported is shown in the graph above.
- The traffic signal asset group is considered to be in an ACCEPTABLE condition.

6) Service Standards

The Service Standards in the TAMP were derived wherever possible from condition data collected by engineering analysis and used to:-

- Monitor the overall condition of assets,
- Monitor our year on year performance, and
- Compare overall progress against the targets contained in the main TAMP document.

As more condition data becomes available for more asset groupings the performance targets contained in the main TAMP will be updated as appropriate and included in a future data refresh document so that they offer a more refined and accurate way of assessing the condition of the asset. Where it is necessary to change the indicators we will clearly explain why such changes are necessary.

The main TAMP document identifies 5 service standards of POOR, ACCEPTABLE, FAIR, GOOD and EXCELLENT, against which the benefits to the users of the asset can be measured. Details of the generic levels of service that each of the transport asset groups are likely to provide to users at each service standard are shown in Appendix 1.

The condition data contained in this data refresh document enables us to compare our performance against the baseline figure contained in the TAMP.

The TAMP set an overall indicative service standard target of GOOD to be achieved at the end of period 2020/21-2024/25. In setting an overall indicative service standard target of GOOD it is recognised that it is not possible or affordable to maintain all asset groups to the same level. The targets for individual asset groups have, therefore, been set according to county council priorities, risk and affordability.

The following table details those assets covered in the TAMP and shows the service standards currently being provided by the transport assets.

Given the range of assets covered by this TAMP, there will inevitably be differences in the condition of each asset grouping. This is determined not only by the intervention intervals but also treatment and remediation options.

The 5 year, 10 year and 15 year target for each asset type is shown in the table below:-

Asset Category	Condition 2013	5 Year Target	10 Year Target	15 Year Target
A, B and C Roads (% RED & AMBER)	A = 25%	A = 10%	A = 10%	A = 10%
	B = 40%	B = 15%	B = 15%	B = 15%
	C = 50%	C = 20%	C = 20%	C = 20%
Residential Unclassified Roads (% RED & AMBER)	28-40%	28-40%	14-18%	14-18%
Rural Unclassified Roads (% RED & AMBER)	28-40%	28-40%	14-18%	14-18%
Footways (Number of defects)	50,000-60,000	<15,000	<15,000	<15,000
Bridges and Similar Structures Bridge Condition Index (Ave.)	80-90	80-90	80-90	80-90
Street Lighting (% of high risk installations)	20-25%	25-35%	25-35%	25-35%
Traffic Signals (% of units beyond design life)	15-20%	30-40%	20-30%	<10%

The overall condition of the transport infrastructure asset has been determined by assigning scores to each service standard. A weighted score has been produced by multiplying each score by the asset valuation. A weighted average is calculated by dividing the total weighted scoring by the total value of the asset, as detailed below

Scores per Service Standard				
POOR	ACCEPTABLE	FAIR	GOOD	EXCELLENT
1	2	3	4	5

Asset Condition Summary June 2017

Asset Group	Valuation £ Million 2015-16	Service Standard	Score	Weighted Score
A Roads	801	ACCEPTABLE	2	1,602
B Roads	476	ACCEPTABLE	2	952
C Roads	1,347	FAIR	3	4,041
Residential Unclassified Roads	3,468	POOR	1	,3468
Rural Unclassified Roads	1,088	POOR	1	1,088
Footway & Cycle ways	831	EXCELLENT	5	4,155
Bridges & Similar Structures	1,203	GOOD	4	4,812
Street Lighting	211	GOOD	4	844
Traffic Signals	18	ACCEPTABLE	2	36
Total	9,997			20,998
Weighted Average Score			=	2.22

Overall grade boundaries have been determined as follows:-

Overall Service Standard – Grade Boundaries				
POOR	ACCEPTABLE	FAIR	GOOD	EXCELLENT
1 to 1.9	2 to 2.9	3 to 3.9	4 to 4.9	5

The initial TAMP assessed the service standard to be 2.26 which determined the transport asset to be in an ACCEPTABLE condition. This improved to 2.56 in 2015, but has fallen in 2016 as a result of gathering and assessing the unclassified road network as POOR. Whilst our overall score may have fallen, our overall service standard is still regarded as being ACCEPTABLE.

According to the general service standards in Appendix 1, our highway and transport asset network should be regarded as being generally free from critical safety defects, although considerable maintenance backlogs do exist which have accumulated, in general, due to insufficient resources being made available over a period of time to maintain the whole asset base.

7) Conclusion

Whilst the overall condition score of our transport assets may have fallen from last year, the condition of the A, B & C road network and the footway network have continued to improve since the introduction of the TAMP. From the above it can be seen that a change in approach from 'worst first' to a preventative maintenance regime has already had a big impact particularly on the A, B and C road network which has seen the condition of many roads in a number of district areas improve to at least those enjoyed in 2009, as measured by the % of RED or AMBER roads across this network.

This approach has also seen a reduction both in the number of defects across the network and the number of footway claims received.

A change in approach from allocating funds on a district basis purely according to asset numbers/lengths in favour of a countywide approach where funding is based on 'need', as determined by the relevant condition data, is starting to have the desired effect of 'normalising' the condition of each asset grouping across Lancashire. This approach needs to be continued so that all our residents and service users are able to benefit from the same service standard regardless of district area.

Due to continued funding pressures we cannot afford to stand still. We need to continue to adapt and evolve if we are to secure the same level of funding as we currently receive. Failure to attract sufficient funding will threaten the County Council's ability to apply the TAMP principles in future years.

Gathering condition data via video survey will significantly enhance the county council's knowledge of the condition of all highway and footway assets and will enable us for the first time to carryout 'scenario planning' so that we are able to make assessments, for instance regarding future maintenance costs using different material choices and different intervention levels.

The results of the video survey data may require us to revisit the service standards contained in the main TAMP document as we will for the first time in many years have engineering data for the whole of footway and unclassified road networks.

Generic Service Standards

Service Standard	Description of Level of Service
POOR	<p>Definition Service delivery that is considered to fall below the minimum standard deemed necessary to maintain the asset in a safe manner. As a result only those essential and critical repairs that are affordable are undertaken. The risks and consequences associated with providing this service level are summarised below:</p> <p>a) Legal</p> <ul style="list-style-type: none"> • Unable to ensure that we carry out all those duties that are incumbent on the authority through law, statutory duties or mandatory requirements; • Insufficient allocation to carry out works to recommendations contained in relevant codes of practice for which there is no approved derogation; • Authority is more exposed to legal action up to and including corporate manslaughter; • Degree of risk may be mitigated by a robust risk assessment which describes the reasons for deviation from the code of practice. <p>b) Safety</p> <ul style="list-style-type: none"> • In all cases except where the asset condition was formerly GOOD or EXCELLENT it is likely to result in a significant increase in the risks associated with safety or legal deficits; • Risks associated with the asset may be increased with attendant risks of legal exposure; • Likely to result in a significant increase in third party claims against LCC for personal injury and third party damage; • Heavy reliance on Safety Inspection regime to identify defects. <p>c) Availability</p> <ul style="list-style-type: none"> • Availability of entire network cannot be guaranteed;

- Poor asset condition means parts of the asset may be withdrawn on a temporary or permanent basis to reduce the safety and legal exposure of the authority;
- As no programmed maintenance work is undertaken assets may be withdrawn from service for some time.

d) Condition

- Condition of the asset will quickly deteriorate as investment is not keeping pace with the maintenance requirements. This standard is not sustainable over the long term;
- It is assumed that the rate of deterioration exceeds the under investment required to maintain condition by a factor of at least 50% i.e. investment £10m less than required means a depreciation of £15m in asset value.

e) Asset Value

- Asset value is likely to be depreciating more rapidly as a result of minimal investment;
- Maintenance heavily reliant on reactive activities which result in unpredictable financial management and highest whole life costs;
- The cost of investment needed to return the stock to the minimum standard is growing rapidly and exceeds the resources available.

f) Public Perception

- Likely to be well aware that the asset is deteriorating and is becoming less available, safe or fit for purpose;
- Members in particular will be facing pressure for improvement and will seek to react to local pressures potentially diluting the impact on overall asset condition;
- Complaints and claims would be expected to be high.

g) Service Delivery

- The principle focus is likely to be reactive maintenance with minimum or no preventative maintenance intervention to prevent asset deterioration;
- It will not be possible to address all issues rapidly and a prioritisation of service demands will be required;
- It is likely that increasing portions of the asset are removed from service and that the trend accelerates with time

	<p>as the asset ages;</p> <ul style="list-style-type: none"> • An increasing backlog of maintenance issues will exacerbate the service problems and lead to a further chain reaction of deterioration; • Depreciation in the asset value would be expected to exceed the under investment required to achieve a FAIR standard. It would be expected that initially deterioration would outstrip underinvestment by 50% with that proportion tending to increase year on year.
ACCEPTABLE	<p>Definition</p> <p>The minimum level of service to meet most statutory requirements and compliance with minimum requirements detailed in national codes of practice. The risks and consequences associated with providing this service level are summarised below :</p> <p>a) Legal</p> <ul style="list-style-type: none"> • The authority complies with the requirements of the relevant codes of practice in all key respects; any derogation is documented and supported by a robust risk assessment; • We know what is required and how we deliver the requirements. <p>b) Safety</p> <ul style="list-style-type: none"> • High reliance on Safety Inspection regime to identify defects; • In all cases except where the asset condition was formerly GOOD or EXCELLENT it is likely to result in an increase in the risks associated with safety or legal deficits; • Safety defects are well defined with performance standards for rectification of those defects. Systems are in place to ensure proper assessment prioritisation and rectification of defects or temporary arrangements to mitigate risk until a permanent repair is possible; • We have relevant information to support our delivery to required performance standards. <p>c) Availability</p> <ul style="list-style-type: none"> • The majority of the asset is available for normal reasonable use.

d) Condition

- The condition of the asset is deteriorating but at a reduced rate compared to POOR standard;
- It is assumed that the rate of deterioration over under investment is of the order of 30% i.e. £10m underinvestment results in £13m of deterioration.

e) Asset Value

- The asset value is likely to be depreciating as a result of minimum investment.

f) Public Perception

- Likely to be well aware that the asset is deteriorating and is becoming less available, safe or fit for purpose;
- Members in particular will be facing pressure for improvement and will seek to react to local pressures potentially diluting the impact on overall asset condition;
- Complaints and claims would be expected to be high. It is highly likely that members or the public would easily distinguish between POOR and ACCEPTABLE standards in their localities.

g) Service Delivery

- The principle focus is likely to be reactive maintenance rather than preventative works undertaken at the optimal time;
- It will not be possible to address all issues rapidly and a prioritisation of service demands will be required;
- An increasing backlog of maintenance needs will exacerbate the service problems and lead to a further chain reaction of deterioration;
- Depreciation in the asset value would be expected to exceed the under investment required to achieve a FAIR standard;
- It would be expected that initially deterioration would outstrip underinvestment by 30% with that proportion tending to increase year on year.

FAIR

Definition

A level of service that generally meets statutory needs and the requirements detailed in national codes of practice. The risks and consequences associated with providing this service level are summarised below:

a) Legal

- The authority complies with the requirements of the relevant codes of practice in all respects and a robust risk assessment exists, except where it chooses not to carry one out. In all such instances any derogation is documented and supported by a robust risk assessment;
- We know what is required and how we deliver the requirements;
- The legal exposure of the authority is reasonably controlled and robust systems are in place to provide supporting evidence of compliance with the code of practice.

b) Safety

- Safety defects are well defined with performance standards for rectification of those defects;
- Systems are in place to ensure proper assessment prioritisation and rectification of defects or temporary arrangements to mitigate risk until a permanent repair is possible;
- We have relevant information to support our delivery to required performance standards. We are proactive in the identification and rectification of those defects;
- In all cases **except** where the asset condition was formerly GOOD or EXCELLENT it is unlikely to result in an increase in the risks associated with safety or legal deficits.

c) Availability

- The majority of the asset is available for normal reasonable use;
- Restrictions of the asset are largely planned maintenance activities rather than emergency repairs with the exception of emergency utility repairs.

d) Condition

- The condition of the asset is stabilised or with minor deterioration;
- It is assumed that the rate of deterioration is under 10%.

	<p>e) Asset Value</p> <ul style="list-style-type: none"> The asset value is likely to be depreciating as a result of other external factors rather than under investment. <p>f) Public Perception</p> <ul style="list-style-type: none"> It is likely that public opinion does not reflect the condition of the asset and the presence of any defects at all would be considered by members of the public to indicate that the asset was in poor condition. <p>g) Service Delivery</p> <ul style="list-style-type: none"> A mixture of preventative maintenance undertaken at the optimal time and reactive maintenance will be delivered although it is possible that outside pressure focuses some investment in areas which do not serve to improve the condition of the asset; The backlog of maintenance needs will probably be growing but at a reduced rate, due to any severe weather events and the reduction of our ability to focus on technically driven programmes.
<p>GOOD</p>	<p>Definition</p> <p>A level of service that is above statutory needs and the requirements detailed in national codes of practice. The risks and consequences associated with providing this service level are summarised below:</p> <p>a) Legal</p> <ul style="list-style-type: none"> The authority generally exceeds the requirements of the relevant codes of practice in key respects; any derogation is minor and defensible, documented, and supported by a robust risk assessment; We know what is required and how we deliver the requirements; We are able to defend legal claims robustly and develop a strong due diligence defence. <p>b) Safety</p> <ul style="list-style-type: none"> Safety defects are well defined with performance standards for rectification of those defects; Systems are in place to ensure proper assessment prioritisation and rectification of defects or temporary arrangements to mitigate risk until a permanent repair is possible; We have supporting information to ensure our delivery to required performance standards;

- Should see a reduction in numbers of third party claims against LCC for personal injury and third party damage.
- c) Availability**
- The vast majority of the asset is available for normal reasonable use.
- d) Condition**
- The condition of the asset has been stabilised but significant improvements will take time It is assumed that the rate of deterioration is minimal.
- e) Asset Value**
- The asset value is maintained as far as is reasonably practical;
 - Relatively high costs in the short term as intervention measures are used to improve asset condition – results in lower whole life costs.
- f) Public Perception**
- It is likely that public perception is still focused on the defects present and that it will take significant time before any improvement in perception of the asset is noted.
- g) Service Delivery**
- A mixture of preventative and reactive service delivery models will be used as the backlog of maintenance issues will only be reduced slowly if at all;
 - Increased capital budget enables preventative maintenance to be carried out. Such works are directed at intervening at the right point to restore the asset to an appropriate condition at minimum cost.

EXCELLENT

Definition

A level of service that is well above statutory needs and the requirements detailed in national codes of practice. Service delivery aimed at maintaining the asset to a high standard. The risks and consequences associated with

providing this service level are summarised below:

a) Legal

- The authority complies with the requirements of the relevant codes of practice in all respects; any minor local derogations are documented and supported by a robust risk assessment;
- We know what is required and how we deliver the requirements;
- We further understand future needs and pressures and have a well-developed strategic plan for the next five years.

b) Safety

- Significant reduction in claims against LCC for personal injury and third party damage;
- Safety defects are well defined with performance standards for rectification of those defects;
- Systems are in place to ensure proper assessment prioritisation and rectification of defects or temporary arrangements to mitigate risk until a permanent repair is possible;
- We have relevant information to support our delivery to required performance standards;
- Performance standards are challenging and reviewed regularly.

c) Availability

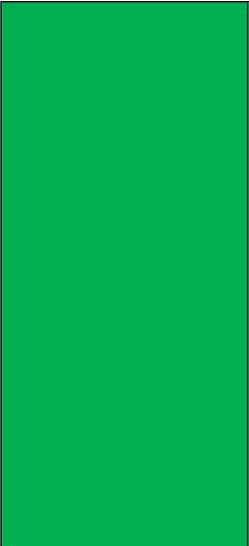
- The asset is available for normal reasonable use.

d) Condition

- The condition of the asset is improving strongly with asset value increasing;
- It is increasingly possible to flexibly assign resources to selected programmes each year as the relative deterioration is marginal year on year.

e) Asset Value

- The investment required to bring the asset to an as new condition is reducing;
- High costs in the short term as intervention measures are used to improve asset condition – results in lowest whole life costs.



f) Public Perception

- Generally public perception of the condition of the strategic and residential road network would be expected to be positive however the response to the few defects remaining will be disproportionate as expectations will steadily increase;
- The majority of the asset improvements will be less visible and the general public and members would not be expected to notice improved drainage, improving lighting column condition or improving bridge condition.

g) Service Delivery

- The principle service delivery is focused on preventative maintenance at the optimal time in an assets life cycle which will effectively reduce the average cost per scheme, particularly in respect of roads, and in turn fuel more rapidly improving condition;
- Operating at a sustainable level using sustainable methods.

Asset Quantities

Provided below is a summary of the number of items we are currently maintaining per asset type.

Adopted Asset Type	Asset Quantity	Unit of Measurement
County Motorways	26.27	km
A Roads	841.67	km
B Roads	457.98	km
C Roads	1,284.49	km
Unclassified Roads	4,120.74	km
Footways	>8,500.00	km
Bridges & Similar Structures		
Armco (corrugated steel structures)	22	No
Bridge	1,332	No
Bridge (Bridleway)	7	No
Bridge (Occupation)	5	No
Footbridge	321	No
Rural Footbridge	1,121	No
Subways	120	No
Street Lighting	148,986	No.
Illuminated Signs and Bollards etc	17,600	No.
Traffic Signals	324	Sites
Pedestrian Crossings	293	Sites