

# Transport Asset Management Plan

Data Refresh - June 2015



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## Transport Asset Management Plan – Data Refresh June 2015

### 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 nationally within the highway sector since the original TAMP was approved and also refreshes the information relating to the condition of our assets so that our performance can be measured.

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

In addition, the data refresh will enable 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.

This first data refresh contains information relating to the various changes the DfT have instigated in order to drive efficiencies in highway maintenance activities. These changes will affect the way money is allocated to local authorities and potentially the amount of money each council receives. A major change is that the DfT now require all local highway authorities to score their own performance against 22 self-assessment questions that are aimed at assessing performance in relation to a number of key criteria. Once complete the answers will be used to place authorities in one of three bands.

In 2015/16 all authorities will receive their full share of the Incentive Fund. In 2016/17 only authorities in Bands 2 & 3 will receive their full share and in 2017/18 only authorities in Band 3 will receive their full share. If the County Council not in Band 3 by 2017/18 then allocations will be reduced.

Whilst the TAMP came into effect on 1<sup>st</sup> April 2015, the County Council started to implement the TAMP methodology in 2014 across a number of asset types. As a result good progress has been made in a number of areas which is illustrated by the fact that the overall condition of our highway and transport assets has improved slightly from 2.26 to 2.35 which categorises the condition as being ACCEPTABLE.

## 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 Councils highway and transport asset network. This first update includes information relating to:-

- Changes in Department for Transport (DfT) funding,
- Changes to Codes of Practice Guidance,
- Actions to address weakness in the TAMP,
- Revised asset condition data,

## 2) Changes to DfT Funding

### a) Pothole Bid

The 2014 Budget announced a £200 million for a pothole fund of which £168 million was made available to local highway authorities in England who were invited to submit bids to the DfT for a share of this money in 2014-15. Shortly after the TAMP was approved the DfT announced the results of the submission process and awarded the County Council a total of £4,901,405.

Since the TAMP was approved the DfT have consulted with local authorities and other stakeholders and have announced a number of other initiative's which will affect future highway maintenance funding.

### b) Incentivised Funding

In order to encourage local authorities to adopt good asset management practice across England, the DfT have 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 has to be validated by the authority's s151 officer before submission to the DfT. Details of the 'incentive bands' and funding % are shown below:-

Year	Band 1	Band 2	Band 3
2015/16	100%	100%	100%
2016/17	90%	100%	100%
2017/18	60%	90%	100%
2018/19	30%	70%	100%
2019/20	10%	50%	100%
2020/21	10%	30%	100%

Details of the self-assessment questions were released in June 2015 with the requirement to submit the first formal assessment at

the end of November 2015. The DfT will assess these submissions and will confirm Incentive Funding allocations in early 2016.

Given the reductions in highway funding over the past few years it is imperative that the authority seeks to achieve a 'Band 3' rating as soon as possible. From the initial 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.

### **c) DfT Challenge Fund**

The DfT have assigned a proportion of the highways maintenance budget to a Local Highways Maintenance Challenge Fund (LHMCF) to fund major capital maintenance schemes over a 6 year period.

The purpose of the LHMCF is to enable local highway authorities in England to bid for major maintenance projects that are otherwise difficult to fund through the normal needs element allocations they receive. Typical works eligible for consideration include:-

- Major maintenance, strengthening or renewal of bridges, tunnels, retaining walls or other structures
- Major maintenance or renewal of carriageways (roads)
- Major maintenance or renewal of footways or cycleways
- Major maintenance or renewal of drainage assets

- Upgrade of street lighting

The DfT have made £575m available over the next six financial years which is to be allocated in two Tranches covering the periods 2015/16 to 2017/18 and 2018/19 to 2020/21. To ensure strong local commitment, promoters need to contribute at least 10% of total scheme costs

In order to bid, local authorities were required to demonstrate that the asset was coming to the end of its lifecycle and is in need of urgent repair or renewal. Bids also had to explain why the project had not been undertaken previously and were asked to include as much evidence as possible including information relating to the Benefit Cost Ratio associated with the works. The deadline for submitting bids for Tranche 1 was 9<sup>th</sup> February 2015.

The County Council successful submitted two bids for the following works:-

- Exceptional M65 motorway infrastructure maintenance
- Upgrading of street lighting

This funding will enable the County Council to replace the central reserve steel crash barrier on the principal motorway section of the M65 between J10-14 with a concrete equivalent that meets current standards which will significantly reduce the risk of a cross-over accident and reduce both on-going maintenance and traffic congestion through no longer having to install lane closures to

replace damaged barriers. The scheme also involves the replacement of side crash barriers and upgrading driver information matrix signs

The fund will also enable the County Council to upgrade in the region of 67,000 street lighting lanterns with modern LED equivalents, replacing up to 4,000 lighting columns that have reached the end of their service life and the provision of approximately 150 charging points to encourage a greater uptake of Ultra Low Emission Vehicles in Lancashire.

It is anticipated that the total cost of these two schemes is in the region of £26,400 of which £19,900 is to be funded by the DfT via the LHMCF. The remaining £6,500 is funded by the County Council as its local contribution. Details of the rules surrounding Tranche 2 will be announced in 2017/18.

### **3) Changes to Codes of Practice Guidance**

Whilst we have a statutory duty to maintain our highways as outlined in the Highways Act 1980, there is no definition in the Act as to the standard of maintenance we are required to provide. In order to promote consistency of provision across the country, the UK Roads Liaison Group produced a number of national codes of practice entitled 'Well Maintained Highways', 'Well-lit Highways', 'Management of Electronic Traffic Equipment' and 'Management of Highway Structures' which provide guidance on a range of highway maintenance activities.

These Codes are currently in the process of being revised to ensure that the advice they contain reflects current developments in the sector and bring about a fundamental change in the way highway infrastructure is managed in the UK, through the adoption of a risk based approach.

The revised guidance and advice will also cover routine and cyclical maintenance, inspections, climate change and resilience, with the aim of reducing the overall cost of the service whilst not compromising statutory duties.

It is anticipated that the revised Codes will be published in autumn 2015 following which the County Council needs to incorporate any changes as considered appropriate in the Highways Maintenance Plan which is in the process of being revised.

### **4) Actions to address weakness in the TAMP**

The TAMP sets out in a clear and objective way how the County Council intends to manage its transport assets over the next 15 years. The TAMP also contains our initial assessments of the condition of all the transport assets which need to be updated at regular intervals during its 15 year life so that we can monitor our progress in achieving the targets set out in the TAMP.

The following explains what we are doing to increase our knowledge of the highway and transport asset and improve the way we manage these assets.

### **a) Highway video surveys**

Due to a lack of current condition data for footways, rural unclassified roads and unclassified urban roads the condition of these assets is determined using critical safety defect data which is defined as those defects that have the potential to cause a slip or a trip and the number of claims received.

In order to improve our knowledge of these assets we have recently secured the services of Gaist Systems on a three year contract who have been employed to carry out video surveys.

The Gaist video survey will record forward, backward, footpath and carriageway facing images every 0.5m to provide an unprecedented level of detail video asset surveys. In the first year it is anticipated that every road and footway we maintain as the highway authority will be scanned. In subsequent years, only selective video surveys will be undertaken and will be directed at those roads or locations that are deemed to be in most need of monitoring.

The video surveys will feed into Gaist software which will enable the County Council to visually see the results on mapping software and will also enable us to carry out 'scenario planning' which will enable us to carry out in-depth analysis with regards to life-cycle planning, material choices and intervention levels etc.

Once the video surveys have been completed the information can be accessed online through a secure connection using standard desktop browsers with no special requirements.

### **b) Core systems review**

The County Council in conjunction with BT Lancashire Services Limited (BTSL) has conducted a review of its core systems and is now working to replace a number of separate legacy asset management systems with a modern integrated software system supplied by Symology.

As custodians of the highway assets and asset inventory data, the Asset Group in conjunction with others are starting the process of cleansing and rationalising the asset inventory to ensure that the migrated data is fit for purpose and will enable the authority to extract timely and accurate information for a range of activities including energy returns, condition updates, performance monitoring, Whole of Government Accounts etc.

In order to ensure the information in the Symology system is maintained in an appropriate manner to the appropriate standard the Asset Group will be looking to devise a data collection and inventory update strategy.

### **c) Moss Roads**

It is estimated that the County Council has in region of 100km of roads that are built on moss land. These 'moss roads' present us

with unique maintenance challenges, primarily due to the fact that a number have evolved from cart tracks and have foundations that are considered unsuitable for their present day usage. In addition, long hot summers, wet winters, action by farmers clearing drains and the use of heavier agricultural and horticultural vehicles have exacerbated the situation and created the condition whereby the foundations of many of moss roads have become deformed and cracked, leading to a variety of problems for road users that include road edges falling away together with uneven road surfaces across and along the road surface.

In order to try and understand the extent of the problems that the moss roads cause to the residents, businesses and visitors to Lancashire we have undertaken a review of the moss roads in the West Lancs District area and are in the process of developing a strategy that looks to ensure that the investment in these roads over the life of the TAMP can be prioritised effectively.

The approach being taken is to develop a hierarchy of moss roads, with individual roads allocated to one of four 'classes' in the hierarchy, depending on the function they serve. The proposed hierarchy is as follows;

- Primary Moss Roads – often class 'A' or 'B' roads that serve as connecting routes for commuters, access to large businesses and industry and link key economic areas together.

- Secondary Moss Roads – locally important roads with typically less traffic than primary moss roads, but which serve villages, educational and recreational facilities and provide access to key amenities such as hospitals, police and fire stations as well as access to tourist attractions.
- Subsidiary Moss Roads – roads that serve isolated domestic properties or farms only.
- Other Moss Roads – roads that only provide access to horticultural or agricultural land for heavy horticultural or agricultural vehicles.

The proposals are currently being considered by legal colleagues following which they will be shared with Parish Councils.

#### **d) Inventory Surveys**

Over the last 12 months the County Council has carried out a number of surveys to ascertain the further details relating to vehicle restraint barriers, retaining wall and highways drainage assets. This information is currently being analysed following which service standards will be developed and the assets included in the TAMP.

#### **e) Changes to Defect Reporting**

At the end of 2013 the County Council changed the way it recorded fault defects and moved away from EXOR in favor of the Highway Defect Sort System. As a consequence we started to record all the defects identified by the Highway Safety Inspection teams across all asset types which means that we are not now



able to compare the defect figures stated in the original TAMP with the defect figures collected recently.

As a result the 2013-14 figures will now become our benchmark figure until condition data for the footway/cycleways asset group and the rural/urban unclassified road asset group can be determined from the Gaist Highway Video Survey.

### **5) 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 Cabinet Member for Highways and Transport approving the TAMP. As this information was used to calculate the overall service standard in the original TAMP this information is the baseline information against which our current and future performance will be measured.

Whilst the TAMP only officially came into effect on the 1<sup>st</sup> April 2015, the County Council started to apply the TAMP methodology across a number of assets earlier than that and as a result good progress has already been made in a number of areas.

The following pages provide 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.

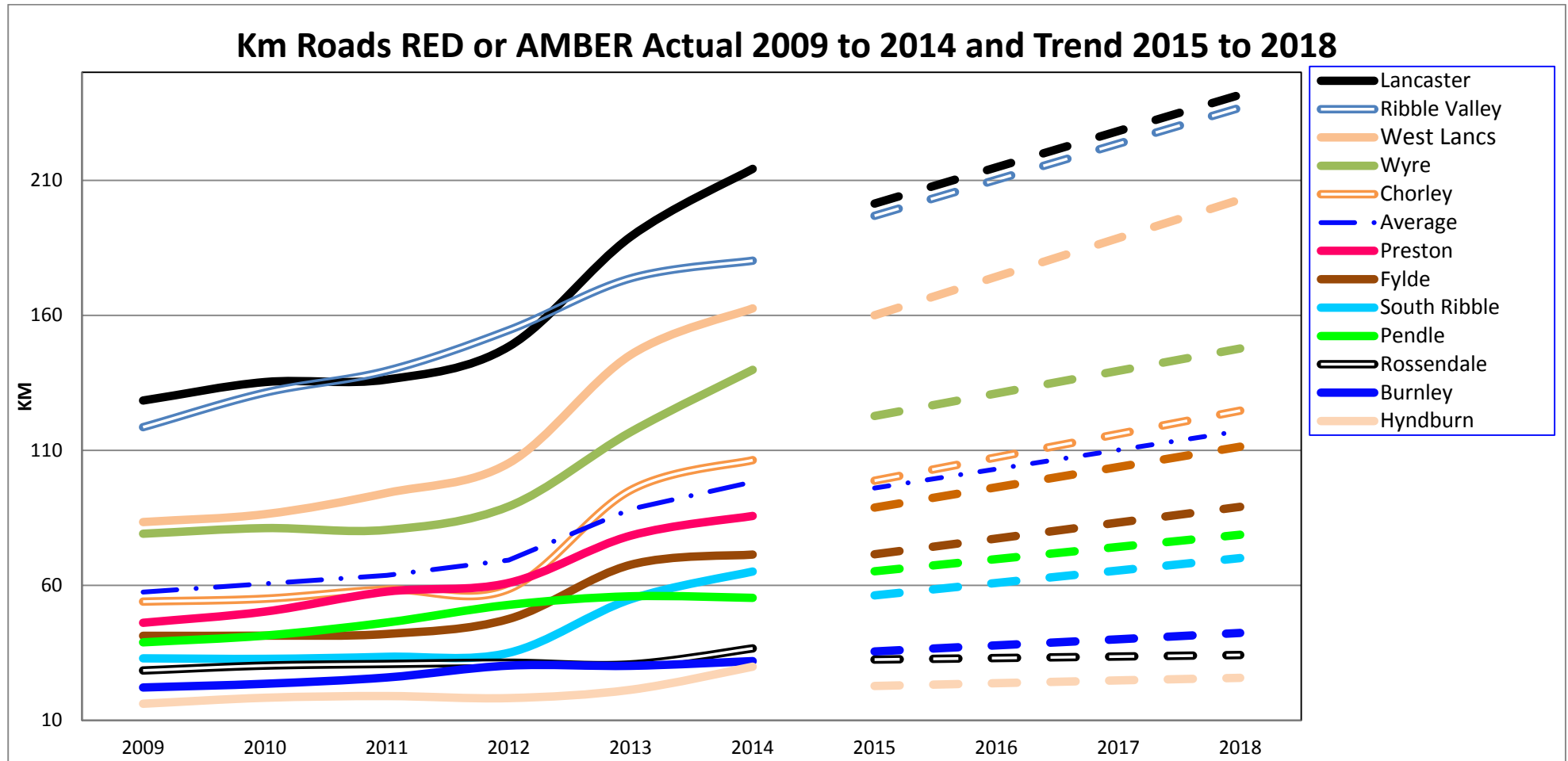
### **A, B and C Roads**

Each section follows a similar basic structure. Where possible graphs will show simultaneously 2014 and 2015 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 2014 and 2015 so that year on year comparisons can be made.

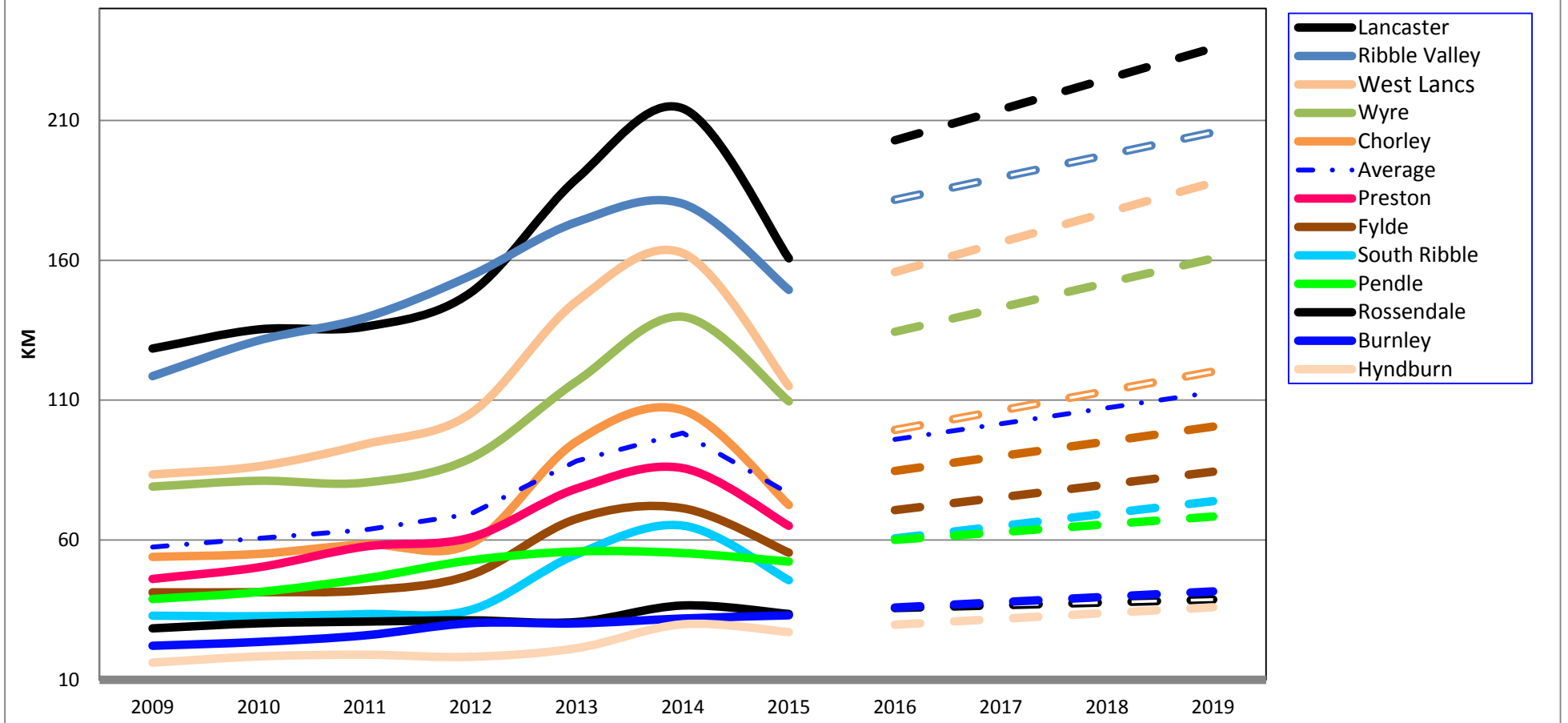
A summary provides key bullet points which seek to outline briefly the key facts relating to the category of the asset. The information presented includes:

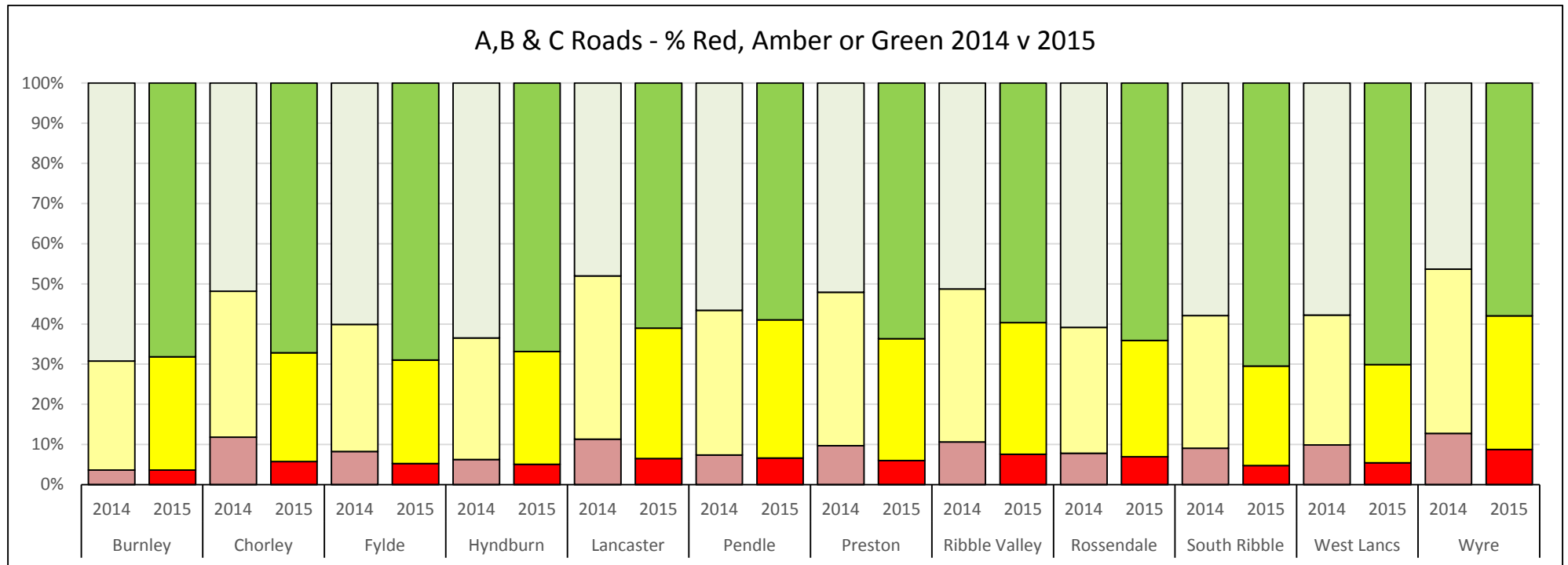
- How much of the asset we responsible for,
- How the condition of the asset is assessed,
- If there any gaps in the information we currently hold,
- The average condition of the asset in 2013 and June 2015,
- The estimated investment required to maintain the current condition,
- How much financial resource has, on average, been available in recent years;

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



### Actual Km Roads RED or AMBER 2009 - 2015 and Trend 2016-2019





### Summary

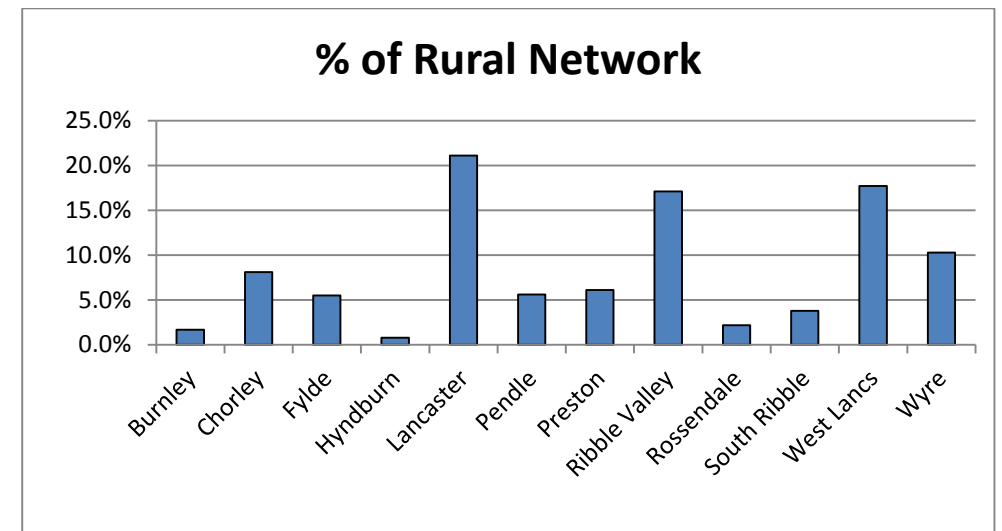
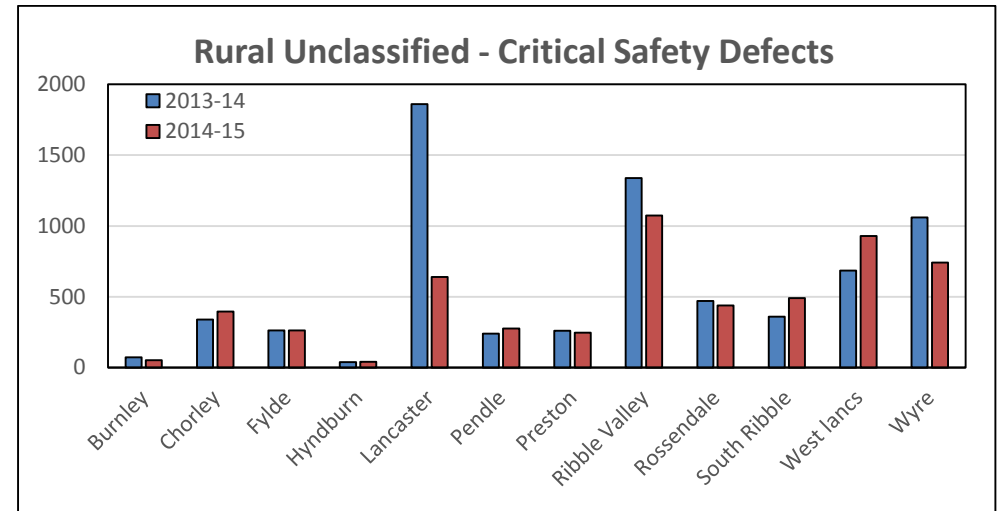
- The asset consists of a total of 2,567km of highway,
- The length of A, B and C roads classified as RED or AMBER in 2014 was in the region of 1,180 km. According to the May 2015 SCANNER survey the quantity of RED or AMBER has reduced by 260km down to 919km, a reduction of 22%
- The general improvement in the B & C road network has returned many of these roads to their 2012 condition across a number of district areas,
- All districts have seen an overall improvement in the condition of the A,B & C road network apart from Burnley which has seen a small increase (3.58%) in RED or AMBER roads, equivalent to 1.14km
- The proportion of RED or AMBER A, B and C roads varies across the district areas and is shown in the graph above
- Between 2014 and 2015 the average % of RED or AMBER on :-
  - A roads reduced by 0.16% (0.38km),
  - B roads reduced by 25.15% (55.65km),
  - C roads reduced by 28.40% (203.82km),

## 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 1,065km.
- A full video survey of this asset grouping is due to be completed during 2015-16.
- 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. 2013-14 defect figures will be used as the new benchmark until the condition can be determined from the video survey,
- Overall there has been a 20% fall (1,398 no.) in defects on rural roads between 2013/14 and 2014/15, with small increases in defect numbers in Chorley, Pendle, South Ribble and West Lancs.
- The current condition of the asset is assessed as being ACCEPTABLE.
- 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.

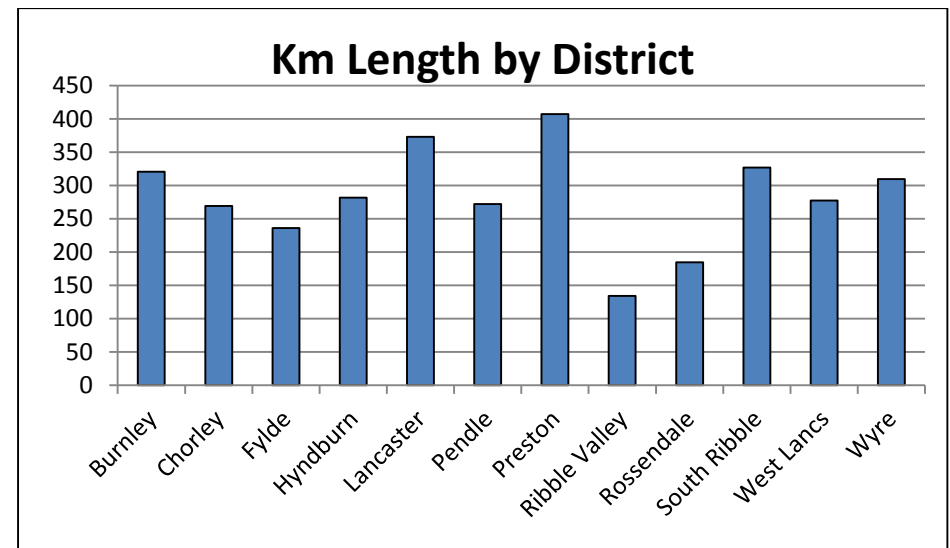
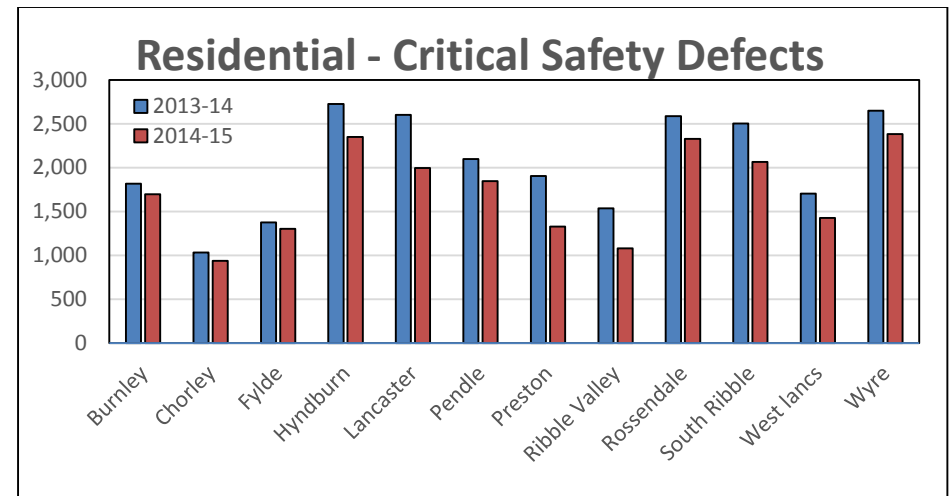


## Residential Roads

**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 3,400 km of residential roads.
- A full video survey of this asset grouping is due to be completed during 2015-16.
- 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 from EXOR to HDSS the defects in the original TAMP are not comparable to the latest figures. 2013-14 defect figures will be used as the new benchmark until the condition can be determined from video survey.
- Overall there has been a 15.5% fall (3,809 no.) in defects on residential roads between 2013/14 and 2014/15. Defect numbers are falling in all district areas. .
- The current condition of the asset is assessed as being ACCEPTABLE.
- 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.
- Secondly, if resources allow, investment will be based on bringing all districts to the county standard.

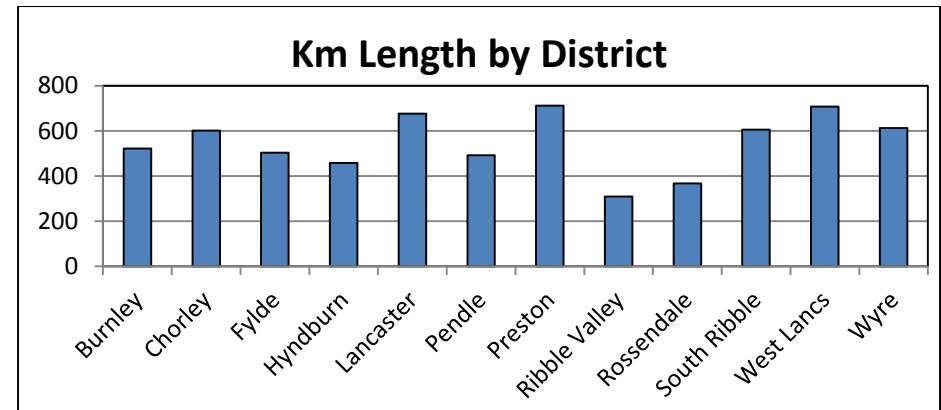
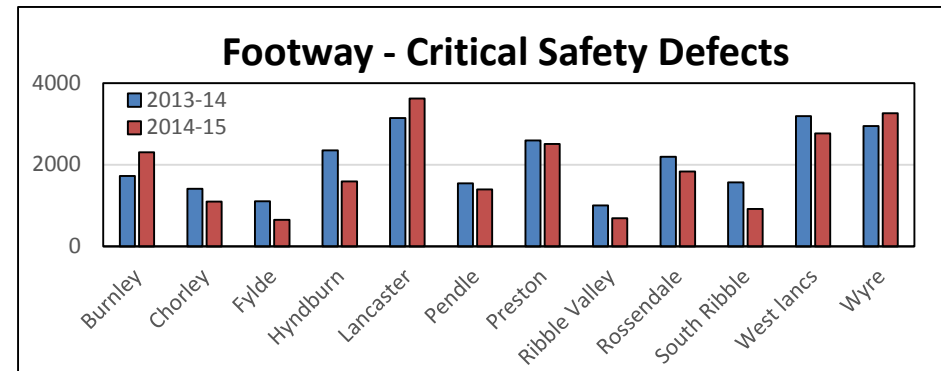
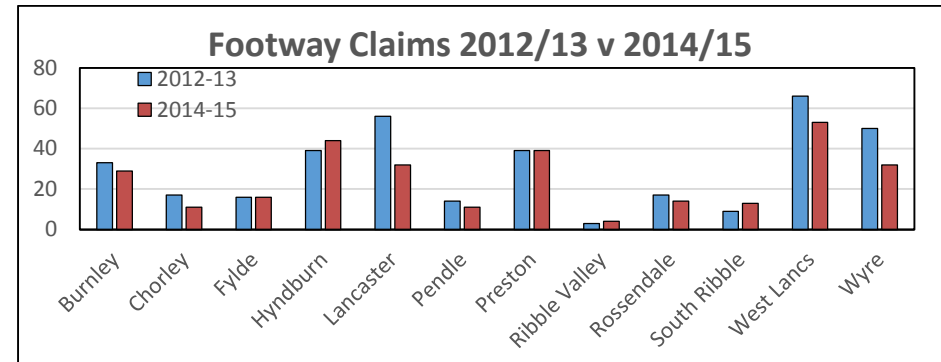


## Footways

**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.
- A full video survey of this asset grouping is due to be completed in 2015-16.
- The current condition is indicated by the numbers of defects identified by highways inspections, as recorded in the Highway Defect Sort System (HDSS) and the number of claims received.
- Due to a change from EXOR to HDSS the defects stated in the original TAMP are not comparable to the latest figures. 2013-14 defect figures will be used as the new benchmark until the condition can be determined from video survey.
- Overall there has been a fall of 8.62% (2,135 no) in footway defects and a 17% fall (61 no.) in claims between 2013-14 and 2014-15.
- Small increase in Hyndburn, Ribble Valley and South Ribble (claims) and Burnley, Lancaster and Wyre (defects).
- The current condition of the asset is assessed as being GOOD.
- 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.



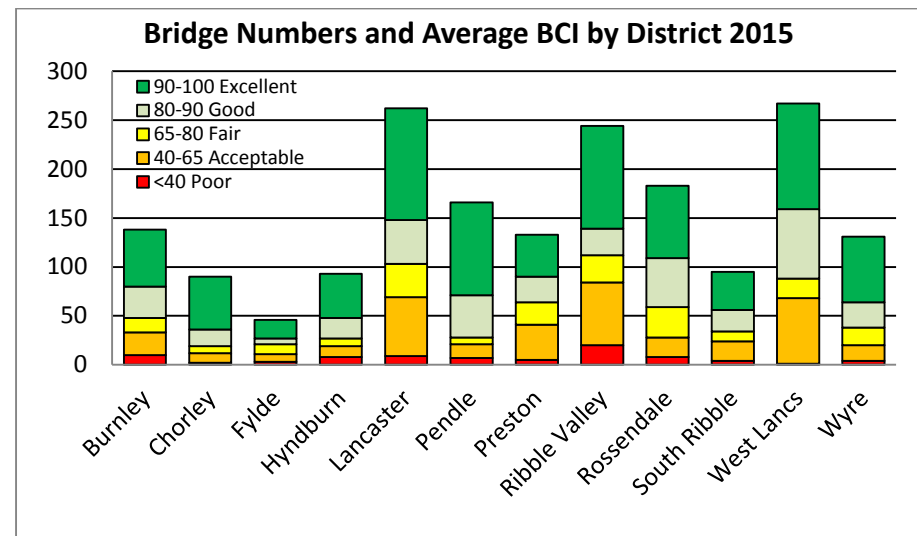
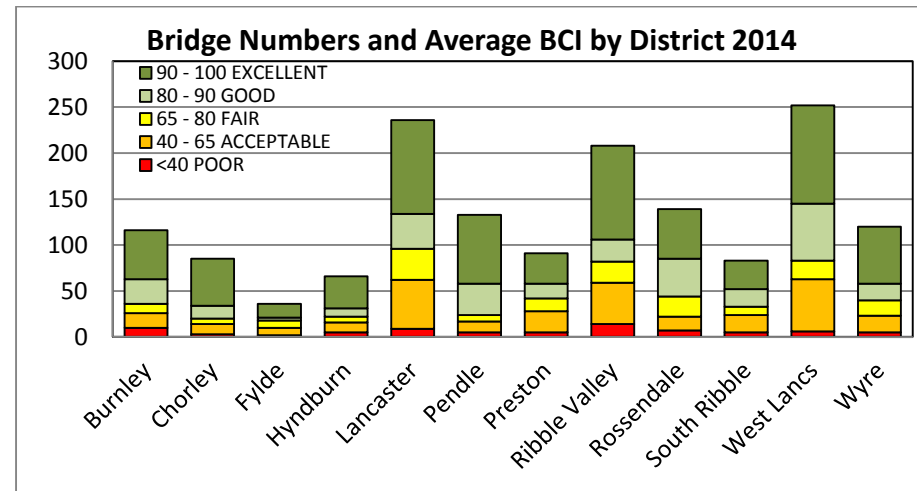
## Bridges and Similar Structures

**Most Cost Effective Strategy:** Investment in preventative maintenance which is not based on reconstruction of bridges but is based on appropriate

### Summary

- We are responsible for approximately 2,000 bridges and similar structures\*,
- We have good condition information relating to the condition of the asset.
- The average bridge condition index has improved from 89.3 in 2014 to 89.99 in June 2015, which is at the very upper end of GOOD with 90 being regarded as EXCELLENT,
- The average bridge condition index has improved in all district areas apart from Burnley and Ribble Valley which have shown slight reductions of 0.30 and 0.90 respectively,
- 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.
- On the basis of the bridge condition data, resources are allocated on the basis of need as individual projects are unlikely to be included in any district based allocation.

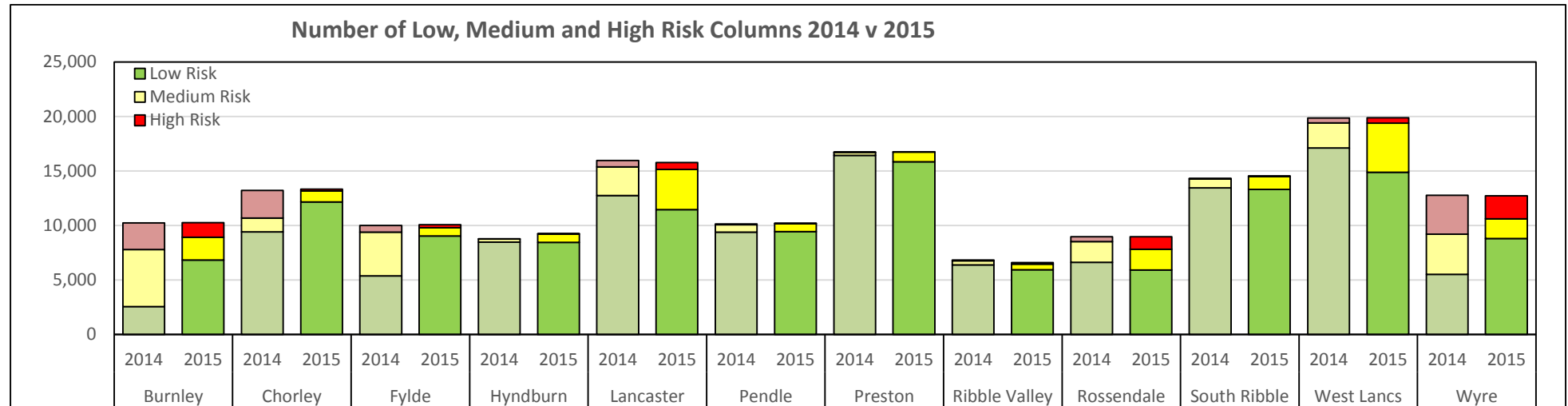
\*Excludes maintenance of Network Rail bridges, major new projects or major refurbishments. \*\*A bridge in poor condition does not necessarily require urgent remedial action and is not automatically at risk of failure or subject to load restrictions.





## 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 best strategy is to reduce the likelihood of columns falling over by either replacing or removing the highest risk columns or removal of columns without replacement.

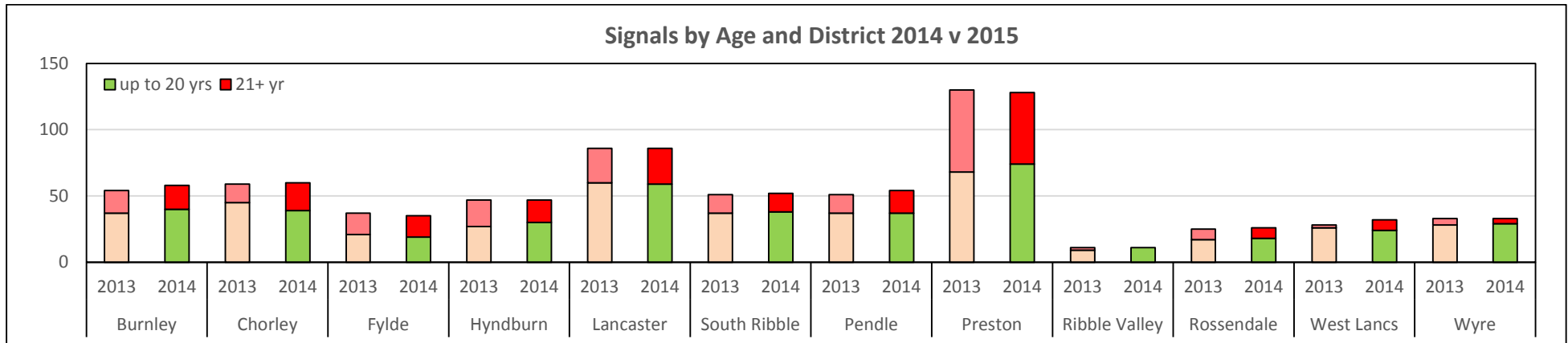


### Summary

- We are responsible for approximately 148,387 street lights and 18,097 illuminated signs, bollards and similar installations.
- We spend in excess of £7m per year on electricity to run those lighting units.
- According to the risk assessment contained in the Institute of Lighting Professionals Technical Report 22 'Managing a Vital Asset' 48% of lighting columns have now exceeded their 'Action Age', a reduction of 2.71% equivalent to 1,986 columns from 2014,
- 26,300 columns are regarded as being of medium to high risk.
- 9,582 medium risk columns (in yellow) will score highly enough in the next five years to be included in the high priority bracket, currently having a score >51,
- 6,500 columns (in red) are the highest risk now having a score >150.
- 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 2015/16 is £1m.

## 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.

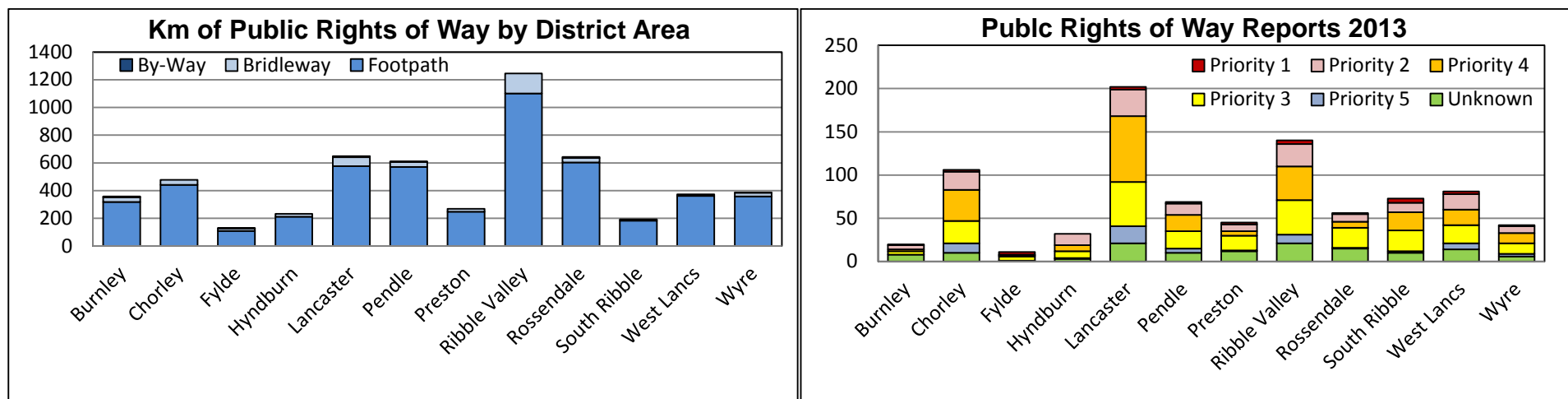


### Summary

- There are 321 sites in Lancashire which are controlled by a total of approximately 1,000 traffic signal / 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.
- We currently have a total of 204 installations (40% of the stock) more than 20 years old – which is no change 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.

## Public Rights of Way

**Most Cost Effective Strategy:** Investment in preventative maintenance which is based on appropriate preventative treatment to key equipment and other actions aimed at ensuring the public are able to exercise their right to pass and re-pass across this network.



### Summary

- The asset consists of 5,560 Km of public rights of way (PROW) comprising public footpaths, public bridleways, public by-ways and by-ways open to all traffic.
- The condition of the asset is collected by an annual inspection of 5% (278km) of the network. Walked lengths are selected at random and are inspected by trained volunteers.
- The condition of the asset is considered to be broadly ACCEPTABLE.
- We have a statutory duty to ensure that every PROW is correctly recorded, signed and available for all legitimate users at all times.
- Approximately 3,000 defects are reported annually across the PROW network.

- We receive more defects across the PROW network each year than we can realistically resolve. Due to problems with legacy system crashes it is not possible at this moment to update PROW defect figures for 2014.
- From 2015 onwards £0.25m capital funding will be made available annually. 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.
- This asset contributes towards health and well-being initiatives and is extensively used for health related leisure activities such as walking, cycling, running, horse riding etc.

## 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. To some extent 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 Now	5 Year Target	10 Year Target	15 Year Target
<b>A, B and C Roads</b> (% RED & AMBER)	<b>A = 25%</b>	A = 10%	A = 10%	A = 10%
	<b>B = 40%</b>	B = 15%	B = 15%	B = 15%
	<b>C = 50%</b>	C = 20%	C = 20%	C = 20%
<b>Residential Unclassified Roads</b> (% RED & AMBER)	<b>28-40%</b>	28-40%	14-18%	14-18%
<b>Rural Unclassified Roads</b> (% RED & AMBER)	<b>28-40%</b>	28-40%	14-18%	14-18%
<b>Footways</b> (Number of defects)	<b>50,000-60,000</b>	<b>&lt;15,000</b>	<b>&lt;15,000</b>	<b>&lt;15,000</b>
<b>Bridges and Similar Structures</b> Bridge Condition Index (Ave.)	<b>80-90</b>	80-90	80-90	80-90
<b>Street Lighting</b> (% of high risk installations)	<b>20-25%</b>	25-35%	25-35%	25-35%
<b>Traffic Signals</b> (% of units beyond design life)	<b>15-20%</b>	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				
<b>POOR</b>	<b>ACCEPTABLE</b>	<b>FAIR</b>	<b>GOOD</b>	<b>EXCELLENT</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

### Asset Condition Summary June 2015

Asset Group	Valuation £ Million 2013-14	Service Standard	Score	Weighted Score
A Roads	835	<b>POOR</b>	1	835
B Roads	496	<b>ACCEPTABLE</b>	2	992
C Roads	1,404	<b>ACCEPTABLE</b>	2	2,808
Residential Unclassified Roads	3,617	<b>ACCEPTABLE</b>	2	7,234
Rural Unclassified Roads	1,133	<b>ACCEPTABLE</b>	2	2,266
Footway & Cycleways	812	<b>GOOD</b>	4	3,248
Bridges & Similar Structures	1,094	<b>GOOD</b>	4	4,376
Street Lighting	189	<b>GOOD</b>	4	756
Traffic Signals	60	<b>ACCEPTABLE</b>	2	120
<b>Total</b>	<b>9,640</b>			<b>22,635</b>
<b>Weighted Average Score</b>			<b>=</b>	<b>2.35</b>

Overall grade boundaries have been determined as follows:-

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

The initial TAMP assessed the service standard to be 2.26 which determined the transport asset to be in an ACCEPTABLE condition. As a result of this data refresh the condition of the service standard has been calculated at 2.35 which represents a 4% improvement from last year. According to the grade boundaries table above, our overall service standard should still be 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.

## **11) Conclusion**

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 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 2012, as measured by the % or RED or AMBER roads across this network.

This approach has also seen a small 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 pressures from the DfT the County Council cannot afford to stand still. It needs to continue to adapt and evolve if it is to secure the same level of funding as it does now. Failure to attract sufficient funding will threaten the County Council's ability to apply the TAMP principles in future years.

Employing Gaist Systems 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 assess future maintenance costs etc. 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
<b>POOR</b>	<p><b>Definition</b> 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><b>a) Legal</b></p> <ul style="list-style-type: none"> <li>• Unable to ensure that we carry out all those duties that are incumbent on the authority through law, statutory duties or mandatory requirements;</li> <li>• Insufficient allocation to carry out works to recommendations contained in relevant codes of practice for which there is no approved derogation;</li> <li>• Authority is more exposed to legal action up to and including corporate manslaughter;</li> <li>• Degree of risk may be mitigated by a robust risk assessment which describes the reasons for deviation from the code of practice.</li> </ul> <p><b>b) Safety</b></p> <ul style="list-style-type: none"> <li>• In all cases <b>except</b> 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;</li> <li>• Risks associated with the asset may be increased with attendant risks of legal exposure;</li> <li>• Likely to result in a significant increase in third party claims against LCC for personal injury and third party damage;</li> <li>• Heavy reliance on Safety Inspection regime to identify defects.</li> </ul> <p><b>c) Availability</b></p> <ul style="list-style-type: none"> <li>• Availability of entire network cannot be guaranteed;</li> </ul>

- 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;



	<ul style="list-style-type: none"> <li>• It is likely that increasing portions of the asset are removed from service and that the trend accelerates with time as the asset ages;</li> <li>• An increasing backlog of maintenance issues will exacerbate the service problems and lead to a further chain reaction of deterioration;</li> <li>• 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.</li> </ul>
<b>ACCEPTABLE</b>	<p><b>Definition</b></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><b>a) Legal</b></p> <ul style="list-style-type: none"> <li>• 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;</li> <li>• We know what is required and how we deliver the requirements.</li> </ul> <p><b>b) Safety</b></p> <ul style="list-style-type: none"> <li>• High reliance on Safety Inspection regime to identify defects;</li> <li>• In all cases <b>except</b> 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;</li> <li>• 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;</li> <li>• We have relevant information to support our delivery to required performance standards.</li> </ul> <p><b>c) Availability</b></p> <ul style="list-style-type: none"> <li>• The majority of the asset is available for normal reasonable use.</li> </ul>

**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;

	<ul style="list-style-type: none"> <li>• It is assumed that the rate of deterioration is under 10%.</li> </ul> <p><b>e) Asset Value</b></p> <ul style="list-style-type: none"> <li>• The asset value is likely to be depreciating as a result of other external factors rather than under investment.</li> </ul> <p><b>f) Public Perception</b></p> <ul style="list-style-type: none"> <li>• 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.</li> </ul> <p><b>g) Service Delivery</b></p> <ul style="list-style-type: none"> <li>• 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;</li> <li>• 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.</li> </ul>
<b>GOOD</b>	<p><b>Definition</b></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><b>a) Legal</b></p> <ul style="list-style-type: none"> <li>• 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;</li> <li>• We know what is required and how we deliver the requirements;</li> <li>• We are able to defend legal claims robustly and develop a strong due diligence defence.</li> </ul> <p><b>b) Safety</b></p> <ul style="list-style-type: none"> <li>• Safety defects are well defined with performance standards for rectification of those defects;</li> </ul>

- 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.