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# Transport Asset Management Plan – Data Refresh February 2020

### **Executive Summary**

This TAMP Refresh covers the period 1<sup>st</sup> April 2018 to 31<sup>st</sup> March 2019 and is the penultimate refresh of the TAMP - Phase 1.

The Transport Asset Management Plan 2015-2030 (TAMP) was approved by the Cabinet Member for Highways and Transport on 10 June 2014 and identified 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 ending March 2019 can be measured and scrutinised.

This data refresh is intended to supplement both the original TAMP and previous years refresh documents so that when read together they provide an up to date and ongoing analysis of the current condition of our transport assets and detailed information of the 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.

Each year the county council is required to complete a selfassessment questionnaire and assess its performance against Department for Transport criteria. As a result of repeating this exercise in December 2018, and submitting the results in January 2019, the county council once again considered itself to be a Band 3 authority in terms of Highway Asset Management.

As a result, the county council has received notification from the Department for Transport that it will receive 100% of its 2019/20 Incentive Fund allocation.

Over the past 12 months good progress has been made in respect of the condition of the A, B and C road networks, which have continue to improve and their overall condition is now better than they were in 2009. The overall condition of our highway and transport assets has increased over the past 12 months, from 2.07 to 2.17 which is an improvement of almost 5%. Our highway assets are however, still regarded as being ACCEPTABLE.

Asset	Magazira		Serv	vice Standa	rd				A	sset Conditi	on	
Category	Measure	POOR	ACCEPTABLE	FAIR	GOOD	EXCELLENT	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
A Roads		>25%	25 - 16%	15 - 11%	10 - 6%	≤5%	<b>22.1%</b>	30.37%	23.92%	23.08%	22.29%	21.51
B Roads	% RED / AMBER	>40%	40 - 21%	20 - 16%	15 - 6%	≤5%	42.3%	36.01%	28.10%	26.27%	24.65%	23.97
C Roads	AIVIDER	>50%	<b>50 - 31%</b>	<b>30 - 21%</b>	20 - 11%	≤10%	48.7%	38.59%	30.62%	34.26% <sup>6</sup>	32.04%	29.80
Residential Unclassified	% RED / AMBER	>50%	50 - 31%	<mark>30 - 21%</mark>	<b>20 -</b> 11%	≤10%	Not	Not	Not	Collected being	Collected being	Collected being
Rural Unclassified	% RED / AMBER	>50%	<mark>50 - 31%</mark>	<mark>30 - 21%</mark>	20 - 11%	≤10%	Collected	Collected	Collected	analysed <sup>1</sup>	analysed <sup>1</sup>	analysed <sup>1</sup>
Footways	No. defects	>50,000	50,000 - 40,000	40,000 - 15,000	15,000- 10,000	<10,000	51,395 <sup>2</sup>	22,171	13,533	13,037	7,142	5,430
	No. claims	>600	500-400	400-250	250-150	<150	359	298	259	130	<b>0</b> <sup>3</sup>	<b>0</b> <sup>3</sup>
Bridges and Similar Structures	Bridge Condition Index (Ave.)	<40	40-60	60-79	80-90	>90	89.3	89.99	90.19	89.75	89.67	89.78
Street Lighting	% of high / medium risk columns	>35%	25-35%	20-25%	10-20%	5-10%	23.15%	17.72%	19.99%	16.15%	15.66%	18.50%
Traffic Signals	% of units beyond design life	>40%	30-40%	20-30	10-20	<10%	33.11%	33.11	30.31	<b>30.31</b> <sup>4</sup>	<b>46.73</b> ⁵	47.79
1 -	Condition data is being collected for the unclassified network using Detailed Video Survey methodology for unclassified roads. Analysis is currently being undertaken and will be reported as part of the TAMP Phase 2 review in the summer of 2020. Provisional data shows that the unclassified road network is POOR compared to the C road network											
2 -			rting systems fo						ear's data. D	etailed Video	Survey data	a for
			d will be reporte									
3 -			ans we data can									
4			)16/17 in updati								nal.	
5 -	The conditio	n of the 207	17/18 Traffic Sig	inals asset h	ias been am	ended after e	rrors were de	etected in the	e 2017/18 cal	culation.		

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

## 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 update includes information relating to:-

- TAMP Phase 2 Review
- DfT Self-Assessment Questionnaire,
- Revised asset condition data,

## 2) TAMP Phase 2 Review

The priorities for Phase 1 concentrated resources on the A, B and C road and footway networks whilst maintaining our other transport assets as close to their 2013 condition as resources will allow.

The second phase of the TAMP is due to start in April 2020 and our main focus during this period will shift to the unclassified road network. Much has changed since April 2014, and before we start Phase 2, we need to undertake an objective review of how we have performed in Phase 1. As part of the Phase 2 review we also need to reassess our assumptions as to what we thought the condition our assets would be in, the budgets required to achieve and maintain certain service standards and what our service standards ought to be.

At their January 2020 meeting Cabinet were advised that this review was ongoing and agreed that the TAMP Phase 2 Review could be authorised in due course by the Director of Strategy and Performance in consultation with the Deputy Leader and Cabinet Member for Highways and Transport.

## 3) TAMP Phase 3 Assets

As set out in the 2014 TAMP our priorities for Phase 3 will be our structures and street lighting assets. Whilst these assets will not receive a significant increase in funding until April 2025 we will continue to proactively manage these in the interim.

Whilst the condition of the bridge stock has remained fairly static over the Phase 1, we have as a precaution, started to carry out an increased number of detailed principal bridge inspections so we can monitor more closely the condition of this asset. We used part of the DfT Incentive Fund to inspect an additional 50 or so bridges in both 2018 and 2019 and propose to increase the allocation for this work in Phase 2 of the TAMP commencing April 2020. During the past 12 months we have found an increasing number of lighting columns that have reached the end of their service life and need replacing. It was not a surprise to see that the most recent service standard shows a fall in condition. In order that the county council can start to proactively manage this decline a small column testing budget was established from the Incentive fund in 2017 to look at columns with suspected issues.

This budget was increased in 2018 and 2019. In March 2019 the Capital Board also approved an additional allocation of £619,000 to enable 6,000 additional columns to be tested and the replacement of 100 columns that had previously been removed on safety grounds.

**4) Department for Transport Self-Assessment Questionnaire** In January 2019, the county council submitted details of its selfassessment score to the Department for Transport for consideration. As a result of our scores for the various competencies, the county council assessed itself to be a Band 3 authority. As a result, we received our full Incentive Fund allocation in 2019/20.

It is vitally important that we continue to look at what we do, how we do it, and continue to improve so that we can retain this status and level of funding. A summary of self-assessment answers for the last four years is shown below:-

	Area Assessed	2016	2017	2018	2019
1	Asset Management Policy & Strategy	3	3	3	3
2	Communications		3	3	3
3	Performance Management Framework	2	3	3	3
4	Asset Data Management	2	3	3	3
5	Lifecycle Planning	2	2	2	2
6	Leadership and Commitment	2	3	3	3
7	Competencies and Training	1	3 3	3	3
8	Risk Management	2	3	3	3
	Resilience				
9	Resilient Network	2	3	3	3
10	Implemented Potholes Review	2	3	3	3
11	Implemented the Drainage Guidance	2	3	3	2
	Customer				
12	Satisfaction	2	3	3	3
13	Feedback	2	3	3	3
14	Information	2	3	3	3
	Benchmarking and Efficiency				
15	Benchmarking	2	3	3	3
16	Efficiency Monitoring	2	3	3	3
	Operational Service Delivery				
17	Periodic Review of Operational	2	3	3	3
17	Service Delivery	2	5	3	3
18	Supply Chain Collaboration	2	3	3	3
19	Lean Reviews	2	3	3	3
20	Works Programming	2	2	3	3
21	Collaborative Working	2	3	3	3
22	Procuring External Highway Maintenance Services	2	3	3	3

If an authority scores 1 in questions 1, 2 or 5, they will automatically be placed in Band 1 overall, regardless of their other scores. A summary of the county council's scores is provided below:-

	2016	2017	2018	2019
Level 1	1	0	0	2
Level 2	20	2	1	2
Level 3	1	20	21	20
Overall Band	2	3	3	3

As a result of our assessment against DfT guidelines, the county council considered itself to be a Band 3 authority. Due to improvements in relation to work programming we strengthened our position as a Band 3 authority.

## 5) New Codes of Practice

Since the last TAMP Refresh in October 2018 the following documents have been approved or refreshed and can be viewed on the Highway Asset Management Website <u>here</u>

- Highways Asset Management Plan
- Vehicle Restraint Systems
- Moss Roads
- Winter Service Plan 2019-20

# 6) Revised Asset Condition Data

Much of the base condition data contained in the Transport Asset Management Plan – Phase One, was compiled in the 18 month period prior to Cabinet Member for Highways and Transport approving the TAMP in 2014 and was used to calculate the overall service standard that the transport assets were providing users at that time.

The 2014 condition data contained in the original TAMP is updated on an annual basis and 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.

Each section follows a similar basic structure. Where possible graphs will show simultaneously 2014 and 2018/19 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 provides key bullet points which seek to outline briefly the key facts relating to the category of the asset. Typically 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 2014 and 2018/19,
- How much financial resource has, on average, been available in recent years;

Due to changes in corporate systems and databases over the past few years, some of the datasets we used in 2014 are no longer available meaning that we are no longer able to provide comparator data to measure and record progress for all asset types. A challenge for the Phase 2 Review is to ensure that asset condition in Phase 2 is measured using current and readily available data and that the measures proposed fully reflect the condition of the asset.

# A, B and C Roads

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







- 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 in the region of 1,179 km. According to the March 2019 SCANNER survey the quantity of RED or AMBER has now reduced down to 710km, a reduction of 468 km (40%),
- According to SCANNER data the overall condition of the A, B and C road network across Lancashire is now better than the 2009 condition,

- Between 2014 and 2019 the average % of RED or AMBER on :-
  - A roads reduced by 29% (71km)
  - B roads reduced by 50% (109km)
  - C roads reduced by 40% (287km)
- Overall between 2014 and 2019 the average % of RED or AMBER on the A, B & C road network has reduced by 469km (40%)
- The A and B road networks are currently regarded as being ACCEPTABLE. The C road network has improved to 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.

- 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.
- As we have not had any survey data 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, we are analysing this data be able to report actual condition in the next refresh.
- 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.

- 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
- We have recently undertaken highway video surveys and are currently working with neighboring authorities to ensure consistent interpretation of the data and development of service standards.
- 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.
- The condition of this asset group was, in the absence of survey data, to have been determined by the number of footway defects and the number of footway claims received.
- Since 2014 the systems and parameters used to collect footway defects have changed, so respective years defect figures are not directly comparable. Specific footway claim numbers are now not readily available.

The 2018/19 figures are based on the period September 2018 to August 2019 and are those collected by the Highway Safety Inspectors. Whilst not directly comparable to 2014, the trend shows there are now significantly less defects across the footway network.

- Condition data for the footway network has now been collected by video survey and we are awaiting this to be analysed by the service provider. It is hoped this will be used in TAMP Phase 2 to report footway condition from 2020 onwards
- Using the latest defect numbers the current condition of this asset is assessed as being EXCELLENT.



### **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 have good condition information relating to the condition of this asset grouping. We are responsible for approximately 2,000 bridges and similar structures\*,
- The average bridge condition index has improved from 89.3 in 2014 to 89.78 in April 2019. The overall condition of this asset is regarded as GOOD.
- The average bridge condition is regarded as EXCELLENT in Lancaster, Wyre, Pendle, Chorley and Fylde. In all other district areas the average bridge condition is regarded as GOOD.
- 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 149,900 street lights and 17,800 illuminated signs, bollards and similar installations.
- Our electricity bill is in the region of £4.5m per annum,
- According to the risk assessment contained in the Institute of Lighting Professionals Technical Report 22 'Managing a Vital Asset' 52% of lighting columns have now exceeded their 'Action Age'.
- Approximately 18.5% of columns are classed as being either medium or high priority for replacement. The number of

medium/high risk columns has increased 23,500 to over 27,200 in the past 12 months, an increase of 16%.

- 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 2019/20 is £1m. It is likely that additional funding from the Incentive Fund will be made available in Phase 2.

## **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.



- There are approximately 660 sites in Lancashire which are controlled by traffic signal and/or pelican crossing installations.
- The condition of this asset is measured in terms of the age of installations which normally have a service life of 20 years, after which they are no longer supported by the manufacturer.
- We currently have a total of 314 installations (48% of the stock) more than 20 years old.
- It is estimated that a replacement programme of £1m per year is required just to stand still. The current funding level is £100,000 per year.
- 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 a POOR condition.

## 7) 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	Asset Category		5 Year Target	10 Year Target	15 Year Target
A, B & C Roads	Α	25%	10 - 6%	10 - 6%	10 - 6%
(% RED &	(% RED & B		15 - 6%	15 - 6%	15 - 6%
AMBER)	С	50%	20 - 11%	20 - 11%	20 - 11%
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%
(% of units beyond design life)		1 <b>5-20%</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					
POOR	ACCEPTABLE	FAIR	GOOD	EXCELLENT	
1	2	3	4	5	

**Asset Condition Summary June 2019** 

Asset Group	Valuation £ Million 2018-19	Service Standard	Score	Weighted Score
A Roads	855	ACCEPTABLE	2	1,710
B Roads	504	ACCEPTABLE	2	1,008
C Roads	1,445	FAIR	3	4,335
Residential Unclassified Rods	3,703	POOR	1	3,703
Rural Unclassified Roads	1,161	POOR	1	1,161
Footway & Cycle ways	727	EXCELLENT	5	3,635
Bridges & Similar Structures	1,406	GOOD	4	5,624
Street Lighting	155	GOOD	4	620
Traffic Signals	19	POOR	1	19
Total	9,975			21,815
Weighted	ore =		2.17	

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 overall service standard to be 2.26, which according to the approved methodology, determined that our transport assets to be in an ACCEPTABLE condition. The overall condition at the end of year one improved to 2.56 in 2015, but reduced in the subsequent two years down to 2.07, mainly due the fall in the condition of the C road network. Over the past 18 months or so, a lot of investment has been directed to our C roads, which has resulted in this now being considered to be in a FAIR condition. As a result of this improvement, the overall condition of our assets has increased to 2.17 and are still regarded as overall, being in an ACCEPTABLE condition.

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.

#### 8) Conclusion

As we are nearing the end of Phase 1 it can be seen that the move away from a 'worst first' to a preventative maintenance regime has had a big impact particularly on the A, B and C road network which has seen the overall condition of our roads improve to at least those enjoyed in 2009, as measured by the % or RED or AMBER roads across the whole network. This approach has also seen a reduction in the number of footway defects across the network.

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 having 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. We need to continue to adapt and evolve if we are to secure the same level of funding as we do now. Failure to attract sufficient funding will threaten the county council's ability to apply the TAMP principles in future years.

# **Generic Service Standards**

Service Standard	Description of Level of Service
POOR	<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:
	<ul> <li>a) Legal</li> <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>
	<ul> <li>b) Safety</li> <li>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;</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>
	<ul> <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.

- 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> <li>It is likely that increasing portions of the asset are removed from service and that the trend accelerates wit as the asset ages;</li> <li>An increasing backlog of maintenance issues will exacerbate the service problems and lead to a further reaction of deterioration;</li> <li>Depreciation in the asset value would be expected to exceed the under investment required to achieve a standard. It would be expected that initially deterioration would outstrip underinvestment by 50% with a standard. It would be expected that initially deterioration would outstrip underinvestment by 50% with a standard.</li> </ul>	chain FAIR
<ul><li>reaction of deterioration;</li><li>Depreciation in the asset value would be expected to exceed the under investment required to achieve a</li></ul>	FAIR
• Depreciation in the asset value would be expected to exceed the under investment required to achieve a	
proportion tending to increase year on year.	
ACCEPTABLE Definition	
The minimum level of service to meet most statutory requirements and compliance with minimum require detailed in national codes of practice. The risks and consequences associated with providing this service lev summarised below :	
<ul> <li>a) Legal</li> <li>The authority complies with the requirements of the relevant codes of practice in all key respects; any dero is documented and supported by a robust risk assessment;</li> <li>We know what is required and how we deliver the requirements.</li> </ul>	gation
b) Safety	
<ul> <li>High reliance on Safety Inspection regime to identify defects;</li> </ul>	
<ul> <li>In all cases except where the asset condition was formerly GOOD or EXCELLENT it is likely to result in an ind in the risks associated with safety or legal deficits;</li> </ul>	rease
<ul> <li>Safety defects are well defined with performance standards for rectification of those defects. Systems are in to ensure proper assessment prioritisation and rectification of defects or temporary arrangements to mitiga until a permanent repair is possible;</li> </ul>	
We have relevant information to support our delivery to required performance standards.	
c) Availability	
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.

- 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:
	<ul> <li>a) Legal</li> <li>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;</li> <li>We know what is required and how we deliver the requirements;</li> <li>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.</li> </ul>
	<ul> <li>b) Safety</li> <li>Safety defects are well defined with performance standards for rectification of those defects;</li> <li>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. We are proactive in the identification and rectification of those defects;</li> <li>In all cases except where the asset condition was formerly GOOD or EXCELLENT it is unlikely to result in an</li> </ul>
	• In all cases except where the asset condition was formeny GOOD of EXCELLENT it is unlikely to result in all increase in the risks associated with safety or legal deficits.
	<ul> <li>c) Availability</li> <li>The majority of the asset is available for normal reasonable use;</li> <li>Restrictions of the asset are largely planned maintenance activities rather than emergency repairs with the exception of emergency utility repairs.</li> </ul>
	<ul> <li>d) Condition</li> <li>The condition of the asset is stabilised or with minor deterioration;</li> </ul>

	It is assumed that the rate of deterioration is under 10%.
	<ul> <li>e) Asset Value</li> <li>The asset value is likely to be depreciating as a result of other external factors rather than under investment.</li> </ul>
	<ul> <li>f) Public Perception</li> <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>
	<ul> <li>g) Service Delivery</li> <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>
GOOD	<b>Definition</b> 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:
	<ul> <li>a) Legal</li> <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>
	<ul> <li>b) Safety</li> <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.

- 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.

- 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	km
A Roads	841	km
B Roads	458	km
C Roads	1,284	km
Unclassified Roads	4,400	km
Footways	>8,500	km
Bridges & Similar Structures		
Bridge (incl. ARMCO)	1,350	No.
Bridge (Bridleway)	9	No.
Bridge (Cycleway)	3	No.
Bridge (Occupation)	7	No.
Footbridge	317	No.
Rural Footbridge	1,126	No.
Stepping Stones	13	Sites
Subways	121	No.
Street Lighting	149,897	No.
Illuminated Signs and Bollards etc.	17,752	No.
Traffic Signals	344	Sites
Pedestrian Crossings	313	Sites