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<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author</th>
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Highways Asset Management Framework

[www.lancashire.gov.uk]
Date Due For Next Review: December 2019
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1) Introduction

Policy

It is the policy of Lancashire County Council to maintain its highway assets in an appropriate and cost effective manner so as to maximise the benefits arising from the resources available. As we are unable to do everything all at once we need to prioritise not only between individual asset groupings but also within each asset grouping.

We will direct investment in our highway and transport assets on the basis of need having consideration to our priorities, risk and the current condition of the assets to which the Transport Asset Management Plan and Highways Management Plan relates.

By continuing our careful stewardship of all of our assets we are aiming to improve the overall condition of our assets from their current ACCEPTABLE condition to FAIR by the end of 2019/20 and GOOD by the end of 2024/25 as calculated by the overall weighted average score which reflects the value and condition of each asset grouping.

Lancashire’s transport infrastructure assets are the most valuable publicly owned resource managed by the County Council, with a combined estimated value of over £10 billion as at June 2015. These assets are fundamental in helping the citizens of Lancashire to not only access a range of County Council services, but also take advantage of the wide range of economic, health, social and recreational opportunities that are available to them. Without this infrastructure Lancashire would not function as a place to live, work or visit.

Given the importance that our transport infrastructure plays in our everyday lives it is vital there are plans in place in order to manage and maintain the highway network in such a condition that it can be fully exploited by a variety of users for a variety of purposes as outlined above.

This Highways Asset Management Framework is intended to be an overarching document that provides a framework for highway asset management in Lancashire. It clearly sets out what highway asset management means to us and outlines the procedures, processes and systems we have, or intend to put in place, to help us ensure that our highway and transport assets are maintained in a condition that is considered fit and safe for reasonable use. It also attempts to explain what we are able to achieve with the limited resources available to us and sets out in a transparent manner how we intend to utilise these resources in the most effective manner.
Within Lancashire, highway asset management has been defined as:-

"A systematic approach to meeting the strategic need for the management and maintenance of highway infrastructure assets through long term planning and optimal allocation of resources in order to manage risk and meet the performance requirements of the authority in the most efficient and sustainable manner".

In order that the County Council can maintain its transport assets in a condition that is considered fit and safe for reasonable use, two complimentary plans have been developed which together seek to focus resources where they can achieve the best overall long term value. These plans are:

- **Transport Asset Management Plan (TAMP)**
  The TAMP was approved by the Cabinet Member for Highways and Transport in July 2014 and sets out how the County Council intends to maintain and improve the transport asset network in Lancashire over the period 2015/16 to 2029/30.

  The TAMP outlines a 15 year programme that is comprised of three phases, each of which runs for five years. The TAMP also introduces a more efficient method for the allocation of capital resources that is primarily based on need. The TAMP looks to manage all our transport assets in a holistic manner and by adopting a more effective method for the allocation of resources it is anticipated that this approach will enable the condition of our transport assets to be significantly improved through the reduction of key maintenance backlogs over the period of this plan.

- **Highway Management Plan (HMP)**
  The HMP was approved by the Cabinet Member for Highways and Transport in July 2009 and outlines the strategy the County Council intends to adopt to support the upkeep of Lancashire's highway assets through a mixture of routine and reactive maintenance activities that are supported from revenue expenditure. As these works are generally small in value, the HMP does not include or support the provision for major improvement schemes as these fall within the remit of the TAMP.

  These plans are refreshed annually.

  We believe that the TAMP / HMP provide users of our highway and transport assets with best value in highways maintenance as they are aimed at obtaining the maximum life from our highways assets at the lowest possible whole-life cost in line with the provisions contained in the Highways Maintenance Efficiency Programme (HMEP).
2) Highway Asset Maintenance in Lancashire

Lancashire is the fourth largest local authority by population in England with a diverse range of highway infrastructure assets reflected in the county's geography and industrial past and provide unique challenges in relation to highway maintenance activities. Typical challenges include:

- Problems with moss roads occur in the agricultural areas on the flat coastal plains in the west of the county,
- Winter maintenance is a major need in the east of the county as the elevation increases,
- Bridges in the urban areas in the east of the county, which were mainly built during the industrial revolution, are nearing the end of their useful life and require extensive maintenance,
- Highway retaining walls are found predominantly in the east of the county where many roads have been constructed on sidelong ground.

From this it can be seen that as the local highway authority for Lancashire, we are responsible for a vast range of transport assets that produces a complex maintenance demand.

Future Funding Issues

Traditionally the resources available for highway maintenance are derived from two sources i.e. revenue and capital.

Revenue expenditure is allocated by the County Council and in the main does not improve the fabric of the asset and is largely used to ensure assets remain in a safe and serviceable condition until capital improvements are needed to replace worn out assets. The revenue budget enables us to attend thousands of defects each year, support a winter response service, a highway safety inspection service and an emergency response service.

Historically capital expenditure has traditionally been funded from two block grants received from the Department for Transport (DfT) which were used to fund local transport plans and highway maintenance works. From an assessment undertaken in 2013, it was clear that in order for us to maintain the condition of all our assets at their 2013 levels the County Council required funding to the value of approximately £35m each year.

Due to changes in the way that central government is to allocate capital resources in future it was considered unlikely that the level of resources available between 2015/16 and 2024/2025 would exceed £25m (at 2014 values). As a result this presented us with a funding gap and a real challenge as to how we can do more, or even the same, with less.

In order to address this funding gap the TAMP was formulated and sets out how we intend to change the way we manage our transport assets in future. The strategy set out in the TAMP is based on managing our assets on a holistic basis and recognises that as we can't do everything all at once, we need to prioritise between our assets based on the relative
importance that each asset group contributes towards our goal of delivering an effective
transport system, which is crucial if we are to help the businesses of Lancashire and achieve
our broader economic, social and environmental goals.

The TAMP sets out a 15-year strategy that comprises of three discrete 5 year phases. The
plan identifies the appropriate strategies we will use to reduce the maintenance backlogs
associated with those assets targeted in each phase. While the plan initially identifies a 5-
year target period for each delivery phase, we have retained sufficient flexibility so that any
of the phases can run concurrently should additional resources become available.

We anticipate that from 2015/16 the level of available resources will allow us to address only
two asset groupings in each phase. As a result the TAMP identifies our initial priorities, if
resources are limited to £25m per annum, should be the A, B and C road and the footway
networks.

The TAMP / HMP have been drawn up in response to these challenges and provide a sound
basis in order that we can address the needs of our highway assets in the most efficient and
effective manner. Our philosophy is based on intervening at the right time with the right
treatment. This is a significant departure from a traditional 'worst first' approach in that we
will be intervening more frequently at an earlier stage in an assets life-cycle. This will enable
us to use more cost effective treatments such as surface dressing, to seal surfaces against
water ingress and reduce the occurrence of potholes, and allow our money to go further.

The TAMP will allow the condition of the network in its entirety to be understood and to
demonstrate a clear defensible strategy for the 15 year life of the plan. In order that other
parts of the network do not suffer, we will maintain the investment in other asset areas at
levels as close to their 2013/2014 level as possible.

The plan is consistent with the national drives for efficiency in highways maintenance and is
intended to provide a legacy of a network in improved condition and greater sustainability.

Road Network Hierarchy
Lancashire has a highway network of over 12,000 kilometres comprising vehicular highways
including Byways Open to All Traffic, bridleways and cycle tracks etc. As highway authority,
the County Council is required by statute to maintain a list of highways maintainable at public
expense.

The County Council has developed its own road network hierarchy based upon nationally
published advice in 'Well-Maintained Highways'. The hierarchy has been designed to reflect
not only the differences in urban and rural use but also the need to have consistent and
efficient highway inspection and maintenance priorities on routes into and through urban
areas.

The County Council's Strategic Road Network comprises Categories 1, 2, 3a and 3b, and
broadly aligns with the Priority Road Network for Winter Service.
In order to assist the prioritisation of scarce resources the TAMP clearly defines the service standards applicable to the major highway and transport assets in Lancashire. The revised HMP will also contain a complimentary set of service standards. Together these service standards reflect the contents of the 1980 Highways Act which requires roads to be maintained in a safe condition having due regard to the normal usage of the road and being mindful of the duty of users to take the road as they find it and to take reasonable care in the use of the assets. The service standards will therefore ensure that similar roads are maintained to the same consistent standard across Lancashire which is appropriate to their normal use rather than applying the standards required of a motorway to a rural unclassified road or vice-versa.

The HMP will define a primary strategic road network, a secondary road network and a series of local networks. Together these networks will ensure that resources are targeted to those areas most in need, as determined by appropriate data e.g. condition, defect etc. This prioritisation will ensure that the right treatment is applied at the right time in the most cost effective method.

**Resilient Network**
The County Council is required to define its resilient network which are defined as those assets which have a significant impact not only on the local economy but possibly on the national economy as well should they fail. Assets that form part of the resilient network may include important parts of the highway network and other assets such as major bridges.

There are many potential risks and threats to the highway network such as flooding, storms, high winds and snow, ice etc. and it is important that appropriate maintenance regimes are in place to deal with these eventualities.

Whilst this network has not yet been defined it is expected to closely mirror the Priority Road Network for Winter Service, plus a number of important roads that provide alternative access to essential services such as hospitals with accident and emergency departments, police, fire and ambulance stations, bus and railway stations, bus garages and depots, salt storage depots and power stations etc.
3) Scope of the Highway Asset

The TAMP / HMP are intended to cover all fixed assets that form part of the adopted highway network for which Lancashire County Council as highways authority is responsible and includes the following assets groupings:

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Asset Size</th>
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</thead>
<tbody>
<tr>
<td>Roads</td>
<td></td>
</tr>
<tr>
<td>• A, B and C Roads</td>
<td>2,567 Km</td>
</tr>
<tr>
<td>• Rural Unclassified Roads</td>
<td>1,065 Km</td>
</tr>
<tr>
<td>• Residential Unclassified Roads</td>
<td>3,400 Km</td>
</tr>
<tr>
<td>• Moss Roads</td>
<td>400 Km (approx.)</td>
</tr>
<tr>
<td>Bridges and Similar Structures</td>
<td>2,000 No.</td>
</tr>
<tr>
<td>Retaining Walls</td>
<td>1000 No. (approx.)</td>
</tr>
<tr>
<td>Footways</td>
<td>8,518 Km</td>
</tr>
<tr>
<td>Drainage</td>
<td>7,000 Km (approx.)</td>
</tr>
<tr>
<td>Gullies etc.</td>
<td>300,000 No. (approx.)</td>
</tr>
<tr>
<td>Street Lighting</td>
<td>150,000 No. (approx.)</td>
</tr>
<tr>
<td>Illuminated Signs and Bollards</td>
<td>16,000 No. (approx.)</td>
</tr>
<tr>
<td>Traffic Signals</td>
<td>1,000 No. (approx.)</td>
</tr>
</tbody>
</table>

In addition we maintain many kilometres of road markings, highway verges, vehicle restraint barriers, thousands of road studs, hundreds of trees and a multitude of street furniture items including non-illuminated signs.

Neither the TAMP / HMP contain any provision for the maintenance of those assets that are not owned by the County Council as highway authority. Not all highways, paths or cycle tracks in Lancashire are adopted highways and not all equipment located within the bounds of an adopted highway is the responsibility of Lancashire County Council.

The list below attempts to outline those asset types that are not our responsibility and for which no provision will be made in the TAMP / HMP.

- Rural cycle paths owned and maintained by Sustrans or others,
- Utility equipment such as telegraph poles and access covers etc.,
- Some bridges carrying adopted highways and footpaths over canals or railways etc., are owned by the Canal & Rivers Trust or Highways England (Historical Railway Estate),
- Retaining walls which either support the highway or retain land above the highway and were built by others, such as Network Rail or private landowners etc.,
- All assets on or associated with the M6, M61, M55 motorways and the A56 and A585 trunk all-purpose roads,
- M65 between J1-9 which is maintained by Highways England.

The table below contains details some of the asset owners identified above and their contact details:
<table>
<thead>
<tr>
<th>Organisation</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustrans</td>
<td>Tel 0117 926 8893</td>
</tr>
<tr>
<td></td>
<td>Web <a href="mailto:reception@sustrans.org.uk">reception@sustrans.org.uk</a></td>
</tr>
<tr>
<td>Highways England</td>
<td>Tel 0300 123 5000</td>
</tr>
<tr>
<td></td>
<td>Web <a href="mailto:info@highwaysengland.co.uk">info@highwaysengland.co.uk</a></td>
</tr>
<tr>
<td>Network Rail</td>
<td>Tel 0345 711 4141</td>
</tr>
<tr>
<td></td>
<td>Web <a href="https://communications-crm.custhelp.com/">https://communications-crm.custhelp.com/</a></td>
</tr>
<tr>
<td>Canal and Rivers Trust</td>
<td>Tel 0303 040 4040</td>
</tr>
<tr>
<td></td>
<td>Web <a href="mailto:customer.services@canalrivertrust.org.uk">customer.services@canalrivertrust.org.uk</a></td>
</tr>
<tr>
<td>Highways England Historical Railway Estate</td>
<td>Tel 0300 123 5000</td>
</tr>
<tr>
<td></td>
<td>Web <a href="mailto:hreenquiries@highwaysengland.co.uk">hreenquiries@highwaysengland.co.uk</a></td>
</tr>
</tbody>
</table>
4) Purpose of the TAMP / HMP

The TAMP / HMP have been written to take into account the guidance contained in a number of documents including the HEMP publication 'Highway Infrastructure Asset Management' and the UK Roads Liaison Group publication 'Well Managed Highways Code of Practice' and provides us with a robust framework that the County Council can use to develop further its asset management expertise.

The TAMP / HMP recognises the financial constraints which Lancashire County Council operates within and the fact that the availability of resources in both financial and human terms has reduced considerably over recent years. As a consequence, it is acknowledged that we are not able to maintain all our highway assets in the same way or to the same standard as previously and both the TAMP / HMP set out in a clear and concise manner what our customers can expect from us with regards the maintenance of our highways assets.

As many parts of our highway network have evolved over a long period of time, some of the assets in use today have not been built to modern day the standards which presents us with some challenging and unique maintenance problems. Whilst we may not be able to maintain all our highway assets in an 'as new' condition or deal instantly with all the defect reports we receive, there is still much we can do to provide a highway network that is fit and safe for reasonable use.

the TAMP / HMP inform members, officers, customers and other stakeholders of the levels of service they can expect when using Lancashire's highway asset infrastructure and when the County Council will take action to repair or make safe those defects that meet intervention levels.

Whilst we still 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', and 'Management of Highway Structures' which provide guidance on a range of highway maintenance activities. These codes of practice have been revised and incorporated into the 'Well Managed Highways Code of Practice' to reflect the latest developments in highways maintenance. This document introduces a fundamental change to the way the UK's highway infrastructure is managed by moving away from prescribing the frequency of inspections and tasks in favour of a risk based approach

It is intended that the TAMP / HMP and our performance will be regularly monitored. It is anticipated that this regular 'review and 'challenge' will ensure that good asset management principles are embedded throughout the organisation and will ensure that our customers and stakeholders experience the same standard of service throughout Lancashire regardless of the point of access.
We acknowledge that one of our key functions will be to explain to our customers what our service standards are together with intervention levels and response times to help them to understand which maintenance actions are prioritised and why. The TAMP / HMP are very closely aligned to each other to ensure that both capital and revenue expenditure are allied to achieving the same goals.
5) Links to Corporate and National Objectives

Demands for a more efficient approach to the management of highway assets have become more prominent in recent years for a variety of reasons arising from the financial pressures that both local government and central government are facing, increased usage of the highway infrastructure and heightened public expectations for a well maintained highway.

Reports by the Audit Commission ('Going the Distance' - 2011), Highways Maintenance Efficiency Programme (HMEP) ('Potholes Review, Prevention and a Better Cure' - 2012) and the Chartered Institute of Public Finance and Accountancy (CIPFA) ('Code for Transport Infrastructure Assets' - 2013) have placed a greater focus and pressure on local authorities to adopt good asset management principles to ensure that their highways are maintained in an efficient and appropriate manner.

The County Council recognises the importance of a well maintained highway network if we are to bring about further economic growth. It is anticipated that improved transport links will not only help boost efficiencies with regards transporting goods to market, but an accessible highway network will also enable Lancashire's citizens to travel easier so that they can take advantage of the improved employment opportunities so as improve their quality of life and life chances.

In order that the TAMP / HMP can help deliver these aspirations it is essential that they are closely aligned with not only national policies, strategies and guidelines but also the County Councils own policies and strategies so order that they fully contributes to their anticipated outcomes.

The TAMP / HMP and all their supporting documents will be the subject of regular review. The County Council's Highway Asset Management webpage will hold copies of supporting policies as a readily available source of reference for members, officers and stakeholders alike. It is anticipated that the webpage will be available in early 2017.

Highways Maintenance Efficiency Programme (HMEP)
The HMEP is a sector led transformation programme aimed at local highways. It is sponsored by the Department for Transport and is intended to run until at least 2018. The aim of HMEP is to:

- Maximise returns from highway investment,
- Deliver efficient and effective services,
- Encourage collaborative working between local authorities,
- Greater collaborative working with ‘supply chain’ partners,
- Smarter procurement,
- Share and promote good practice to improve roads and delivery efficiencies.
- Transform service deliver so as to bring about efficiency savings of 15% by 2015 and 30% or more by 2020.
The HMEP recognised that many local authorities need better advice and information if they are to improve how they manage their highway infrastructure assets. With this in mind a number of practical and usable toolkits have been developed to help local highway authorities plan and deliver efficiencies so that local funding can go further. The HMEP have published a number of documents including the ‘Highway Infrastructure Asset Management Guidance’ which includes 14 recommendations local authorities are urged to adopt if they are to achieve the full benefits of asset management and make better use of their scarce resources. The TAMP, HMP and this overarching document have been written in such a way that collectively they fully incorporate these recommendations.

The County Council has adopted an evidence based approach to highway asset maintenance which is fully documented within the TAMP / HMP. As active members of the Midlands Service Improvement Group, the Greater Manchester Association of District Engineers and the Local Council's Highway Investment Group, the County Council closely collaborate with other authorities to seek out better practice and realise efficiency savings arising from the use of framework contracts etc.

UK Roads Liaison Group – Codes of Practice
Since its creation the UK Roads Liaison Group (UKRLG) has considered the dissemination of best practice and one of its key roles was the publication of three national codes of practice containing advisory standards relating to highways, street lighting and structures.

In autumn 2014 work began to update the three national codes of practice and consolidating them into the ‘Well Managed Highways’ code of practice which reflects current developments in the highway sector and proposes a fundamental change in the way highway infrastructure is managed in the UK, through the adoption of a fully risk based, locally developed approach covering routine and cyclical maintenance, inspections, climate change and resilience, with the aim of reducing the overall cost of the service while not compromising statutory duties.

The revised CoP was published in autumn 2016. As a result the County Council has two years to fully implement this CoP.

Draft Corporate Strategy
The draft Corporate Strategy sets out the future direction for County Council and includes information relating to LCC’s core purpose, vision and values and says that the core purpose of the County Council is to work for the people of Lancashire to enable them:

- To live a healthy life,
- To live in decent homes in a good environment,
- To have employment that provide an income that allows full participation in society.

The draft Corporate Strategy identifies a number of key priorities which are seen as essential if the above are to be achieved:
• Invest in locally accessible green infrastructure that helps to make cycling and walking to work, school and local services a practical safe choice,
• Invest in preventative maintenance to improve the conditions of roads and footways,
• Support green energy solutions in Lancashire and develop green energy solutions for the county as a whole and reduce the council’s own energy use,

The draft Corporate Strategy recognises that Lancashire’s transport infrastructure is a priority for the council as good accessibility, including driving, public transport, walking, cycling forms an essential part of our everyday lives and advises:

• It is vital that there are plans in place to maintain and manage our transport infrastructure so that the economic, health, social and recreational benefits and opportunities are maximised,
• Investing in the highways and transport network is important to the council and our commitment to support the economy and to tackle deep-seated inequalities in its people's life chances, revitalising communities and providing safe, high-quality neighbourhoods are our key priorities,
• We will improve the conditions of our roads and footways by investing in evidence based preventative maintenance and deliver a capital expenditure programme on highways maintenance over the next 15 years,

Local Transport Plan
The County Council’s third Local Transport Plan (LTP3) sets out LCC’s transport priorities until 2021 and shows our commitment to support Lancashire’s economy by tackling deep-seated inequalities in its people's life chances, bring new life to our communities and provide safe, high-quality neighbourhoods.

Transport Masterplans
As part of this, the County Council as the highways and transport authority for Lancashire has produced a set of Highways and Transport Masterplans covering the 12 district council areas Lancashire. Rather than produce a Masterplan for each district, five separate Masterplans have been created to reflect the travel areas identified in the County Council's Local Transport Plan. The five Masterplans are:

• **Central Lancashire**, covering Preston, South Ribble and Chorley
• **East Lancashire**, covering Blackburn-w-Darwen, Burnley, Hyndburn, Pendle, Rossendale and Ribble Valley
• **West Lancashire**, 
• **Fylde Coast**, covering Blackpool, Fylde and Wyre,
• **Lancaster**

The Masterplans set out a cohesive highways and transport strategy for the whole county, linking economic development, spatial planning and public health priorities to the wider policy objectives of the County Council and West Lancashire Borough Council. In addition, Central Government via the Preston, South Ribble and Lancashire City Deal and the Burnley-Pendle Growth Corridor are making a significant investment in Lancashire which is
aimed at expanding the transport infrastructure, creating thousands of new jobs and homes and growing local economies.

The TAMP / HMP therefore have a vital role to play in promoting the economy of Lancashire and improving the health and life opportunities of Lancashire's residents by ensuring that the County Council's highway and transport assets are maintained in such a condition so that the opportunities set out in the masterplans, the City Deal and Growth Deal are realised.

A diagram showing the relationship between corporate objectives, national objectives and highway service delivery is show below.
Relationship between Corporate Objectives and National Objectives

- Lancashire's Strategic Transport Vision 2011-2021
- LCC Corporate Strategy 2016 onwards
- CIPFA and UKRLG Codes of Practice
- Central Government
- Lancashire Highway Asset Framework
- Highways Maintenance Efficiency Programme (HMEP)
- DfT Challenge Fund and Pot hole bid
- City Deal and Growth Deal
- 5 x Masterplans
- Transport Asset Management Plan (TAMP)
- Highways Management Plan (HMP)
- Commissioning Plans
- Stakeholder Expectations
- Highway Maintenance Service Delivery
- Stakeholder Expectations

Customer / Stakeholder Experience
6) Levels of Service

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 level of maintenance we are required to provide. In order to promote consistency of provision across the country, the UK Roads Liaison Group has 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 activities. Although we follow these codes wherever possible there are instances where we do deviate from this guidance. In all cases, these are recorded within the appropriate asset section.

In order that we can determine the level of service that our assets are providing and incorporate this into our evidence base we have developed detailed service standards that we will apply to each of our assets. To ensure a consistent approach between asset groupings these service standards have been drawn from one generic service standard. How we are actually performing against these service levels was initially determined by a combination of condition survey and analysis and also by feedback from those who have an interest in our networks.

Our Generic Service Standards
As no national standards of service have been developed, we have had to develop our own. Therefore all the standards of service in this document and the TAMP should be regarded as 'Lancashire Standards'.

In order to guide our thoughts on developing the Lancashire Standards we compared our performance to that of other authorities where information was available. Using this information we have identified the five generic service standards POOR, ACCEPTABLE, FAIR, GOOD and EXCELLENT that the transport asset network could provide.

The general generic characteristics and consequences associated with each service standard are set out at Appendix 1.

Measuring Asset Condition.
Monitoring and measuring the condition of our assets over a period of time enables us to determine how successful or otherwise our maintenance strategies or material trials have been, thereby giving us an early opportunity to amend these if required.

In an ideal world the condition of all of our assets would be determined by the use of up to date condition data. As this was not available when the TAMP was drafted we used alternative data sources in the interim for a number of asset types so that we were able to make initial assessments of the overall condition of the asset grouping. As the quality of our data improves we will be able to revisit our service standards and update these as appropriate.
We intend to address this data-gap by collecting condition data that is considered most appropriate for each particular asset grouping.

For some assets this will include information collected via mechanical means, for others this will involve the collection of objective data by highway inspectors or operatives using national guidelines. For other assets, the condition will be determined using data sources such as age profiles etc.
7) Data Gathering Strategy

The transport infrastructure asset is very diverse encompassing highways, structures, street lighting, signs and other street furniture. In order to make the most appropriate investment decisions it is vital we have sufficient knowledge of the condition, location and lifespan of each of the highway assets. The level of information required will vary depending on the:

- benefits of specific information,
- costs of collection of information,
- resource costs of maintaining the data once gathered,
- relative importance of the maintenance decisions required,
- requirements of whole government accounts,

The Core System review is a data gathering strategy is currently underway, the purpose of which is twofold. Firstly to service the data needs of the County Council's core information technology system so as to provide up to date accurate and reliable data to inform LCC's operational decisions and secondly to co-ordinate the required data gathering to ensure that allocation decisions are informed by appropriate, current and reliable data. Given the complexity and diversity of the information required it is accepted that it may not be possible to gather all of the data for all asset groups annually.

Assessment of the condition of each type of highways asset may have different data capture mechanisms. It is anticipated that the data gathering strategy will identify:

- data currently held and its fitness for purpose,
- most appropriate way of gathering the data,
- most appropriate time to gather data,
- mechanisms to utilise the data captured,
- any limitations of the data gathered,
- outputs required from the data captured,
- frequency data gathering is required,
- costs associated with the capture of the data required,
- level of detail to hold against an asset,
- how long details will be retained to satisfy legal or operational purposes,
- person(s) required to maintain the data once it is obtained,

Information about the condition of the asset is required by April each year so that we can assess the most appropriate way to allocate resources between the different asset groups, so that they have the most impact in terms of improving and/or maintaining asset condition and the level of service the asset provide to users.

As our allocations will be based on a needs basis, the allocation criterion will be reviewed annually and may be subject to change each year, dependent upon the most up to date available asset condition data.
Our data gathering strategy will seek to prioritise the data gathering exercise in order to produce annual data gathering plans which themselves have a life cycle of four or five years.

The TAMP / HMP are committed to delivering efficiencies in all aspects of how we maintain the highway network in Lancashire. Having up to date and robust data will improve the effectiveness of our financial decisions with regards investment into the highway network and provide us with the following benefits:

- provide reliable data returns to central government,
- supports sound prioritisation of capital schemes,
- enables planning for future maintenance activities rather than rely on reactive maintenance,
- providing good information to show how the asset is performing and changing with time,

CIPFA advise that prioritisation is given to high-value, high-spend items before collecting information relating to lower-value, lower spend assets. According to the 2015 Whole of Government Account returns the following assets are regarded as high value items and require key data to be collected on a regular basis.

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Asset Value £'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential unclassified road network</td>
<td>£3,719,000</td>
</tr>
<tr>
<td>A, B and C road network</td>
<td>£2,814,300</td>
</tr>
<tr>
<td>Rural unclassified road network</td>
<td>£1,166,100</td>
</tr>
<tr>
<td>Structures (bridges and retaining walls etc)</td>
<td>£1,201,300</td>
</tr>
<tr>
<td>Footways and cycle tracks</td>
<td>£832,000</td>
</tr>
<tr>
<td>Street lighting and signs/bollards</td>
<td>£206,400</td>
</tr>
<tr>
<td>Traffic management</td>
<td>£62,900</td>
</tr>
<tr>
<td><strong>Total Asset Value</strong></td>
<td><strong>£10,002,000</strong></td>
</tr>
</tbody>
</table>

Condition / performance data needs to be collected as easily as possible, as and when assets are visited as part of a routine maintenance or fault repair visit so that defects are reported and actioned as required.

As part of the core systems review a number of legacy highway infrastructure databases are being replaced with one integrated asset database which will be the sole central point for the storage of asset data and the extraction of condition information etc. It is anticipated that the new highway infrastructure asset management system will support the widespread use of handheld devices, meaning that performance / condition data for a number of assets can be updated in real time so as to avoid the need for manual input making it easier to collect, upload and maintain our data in future years.

Where the cost of data collection outweighs the business benefit or may not be affordable, we will adopt a risk based approach where consideration is given to:-
- historic concerns over existing performance,
- how the data supports statutory requirements,
- reputational consequences associated with network disruption, reduction in serviceability,
- critical parts of the network,
- safety of the network,
- likely increased long cost of maintenance arising from inadequate data to make long term investment decisions,
- critical nature of the asset in supporting the functioning of the network,

Given the complexity and diversity of the information required we will phase data collection across the group of assets.
8) Leadership and Commitment

The County Council recognises that support from senior decision makers, asset managers and practitioners is essential if asset management principles are to be adopted and implemented through all layers of the organisation.

In order that the principles contained within the HMP are adopted and implemented throughout Lancashire the County Council has established a Highways Infrastructure Asset Management Strategy Board (HIAMSB) which comprises;

- Director of Corporate Commissioning,
- Director of Community Services,
- Director of Programmes and Project Management,
- Head of Service for Asset Management,
- Head of Service for Highways,
- Head of Service for Design & Construction,
- Highways Asset Manager

The HIAMSB meet on a regular basis to review various aspects of highway asset management and performance to ensure that the principles contained in the TAMP / HMP are implemented consistently throughout the organisation.

The responsibilities of the HIAMSB include:-

- Implement the Highways Asset Management Framework (HAMF);
- Implement the 14 recommendations identified in the HMEP document 'Highways Infrastructure Asset Management Guidance',
- Oversee and monitor the annual completion of the highways self-assessment questionnaire,
- Provide direction and support where there is a change in policy or approach, or to reflect improvement actions identified as a consequence of the outcome of banding for the self-assessment questionnaire,
- Ensure the delivery of the TAMP and HMP,
- Endorsement and regular review of the TAMP and HMP and their objectives and strategies,
- Development of performance targets in order to measure performance of the TAMP and HMP,

In addition a Highways Infrastructure Asset Management Implementation Group (HIAMIG) has been formed and meets on a monthly basis to monitor the progress. The outcome of these monthly meetings will be reported into the Highways Infrastructure Asset Management Strategy Board (HIAMSB) who will be responsible for monitoring progress.
The membership of the HIAMIG monthly meetings will be broken down into sub groups in accordance with one of the following sections:

- Asset Management;
- Resilience;
- Customer;
- Benchmarking and Efficiency and Operational Delivery.

Overview and Scrutiny periodically review progress in relation to the implementation and execution of the 15 year Transport Asset Management Plan.

In addition the Highways Asset Manager regularly meets with highway practitioners in various parts of the organisation to discuss a range of highway maintenance issues to reinforce the contents of both the TAMP / HMP.
9) Communications

An important aspect of the TAMP / HMP is how we communicate with our stakeholders. In order that we can manage stakeholders expectations the TAMP / HMP both clearly set out the service standards they can expect from each of the highway asset groupings. The HMP in particular, clearly sets out what we will and will not do and the level of response that will be provided with regards defect intervention levels.

External stakeholders
Public perception of the condition of highway infrastructure assets and the level of service provided in Lancashire will be varied and influenced by personal characteristics such as whether they are pedestrians, motorists or passengers etc.

The County Council seeks to understand the views of Lancashire residents in recognising that each category of user will have different needs. This will be in turn be taken into account alongside our approach to asset management. Traditionally the County Council has sought stakeholder views through the in-house 'Living in Lancashire Panels' which are conducted by asking a panel consisting of over 3,000 members who are residents of Lancashire from all walks of life right across the county on their views and opinions about local services and life in Lancashire. They tell us about what is needed in their area, what is going well and where we can improve on service provision.

The panel members are voluntary participants in the research they complete and no incentives are given for completion and membership has been designed to be a representative cross-section of the county’s population. The results for each survey are weighted in order to reflect the demographic profile of the county’s population. It provides access to a sufficiently large sample of the population so that reliable results can be reported at a county wide level. It also provides data at a number of sub-area and sub-group levels.

The panel is refreshed periodically. New members are recruited to the panel and some current members are retired on a random basis. This means that the panel remains fresh and is not subject to conditioning i.e. the views of panel members become too informed with County Council services to be representative of the population as a whole.

Online Survey
In addition to the above the County Council will with effect from 1 April 2016 be seeking the views of all residents affected by highway capital works. Prior to the commencement of each scheme the County Council will conduct a 'letter drop' to all residents and businesses effected by the works. In addition to notifying of the works the letter will inviting feedback either via the internet or by phoning the Customer Service Centre. The Online Survey is available at www.lancashire.gov.uk/roadsurvey

The results of the above surveys will be analysed and a formal mechanism for consideration of those suggestions will be established and acted upon to bring about continuous improvement action. The results of the surveys will also be complied into and published in the form of the annual report.
The modern technology delivered by the core systems review will also allow us to provide a more responsive, transparent and accessible system enabling customers to access services through the Customer Service Centre or internet as we move to make significantly greater use of 'self-service' facilities and improved customer satisfaction by:-

- designing customer-focused services to meet stakeholder expectations
- being clear about what can be done and when; and then
- delivering on that commitment

This will enable customers to not only report faults more easily but also receive updates from us, providing information on what we intend to do once the defect has been reported. It is anticipated that revising the HMP at the same time as installing the this system will enable the HMP principles to be incorporated into the new countywide software system at the design stage so that we will be able to provide a consistent standard of service across several different area offices regardless of which method customers choose to report defects.

The County Council will continue to monitor the effectiveness of the feedback provided by the in-house systems and will also gather and monitor feedback as collected by the National Highways and Transportation Survey and will use this information to adapt/design the services it provides.

**Internal stakeholders**
The TAMP / HMP and supporting policies etc. will be available on the intranet so that members and officers can make reference to these as and when the need arises.

Changes affecting the way we have traditionally done things and the need to adopt robust asset management principles are now regularly cascaded to members and officers through presentations to area based staff and attendance at Overview and Scrutiny Committee. At these meeting members and officers have been made aware why the County Council needs the TAMP / HMP and why it has had to change the way it does things as a result of the DfT Self-Assessment Questionnaire etc.

**Reporting Mechanisms**
It is acknowledged that from time to time a small number of defects may be present on the highway network and that such defects may be detected by members of the public before planned inspections can be carried out by the Highway Safety Inspection Teams. The County Council acknowledges it is essential there are mechanisms in place to enable defects found by members of the public to be reported as easily as possible and its preferred reporting mechanism is electronically using the link to the 'Report It' website


From here members of the public and others can report faults and keep track of progress via the unique reference number that is issued for each reported defect. In addition the
'Report It' website the County Council has a number of other mechanisms is place to report defects as set out in the table below:-

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td><strong><a href="mailto:enquiries@lancashire.gov.uk">enquiries@lancashire.gov.uk</a></strong></td>
</tr>
<tr>
<td>Telephone</td>
<td>0300 123 6701</td>
</tr>
<tr>
<td>Minicom</td>
<td>01254 220 666</td>
</tr>
<tr>
<td>SMS</td>
<td>07860 031 265 (Monday - Friday 9am to 5pm)</td>
</tr>
<tr>
<td>Fax</td>
<td>01772 536 199</td>
</tr>
<tr>
<td>Address</td>
<td>Lancashire County Council&lt;br&gt;PO Box 78 County Hall&lt;br&gt;Fishergate, Preston&lt;br&gt;Lancashire, PR1 8XJ</td>
</tr>
<tr>
<td>Twitter</td>
<td>@LancashireCC</td>
</tr>
<tr>
<td>Facebook</td>
<td><a href="https://www.facebook.com/lancashirecc">https://www.facebook.com/lancashirecc</a></td>
</tr>
</tbody>
</table>
10) Performance Management

The integrated asset management system will make it possible to extract 'real-time' performance information enabling appropriate service managers to compare at any point in time how actual performance compares to the stated service standard for any asset grouping in respect of response times etc.

It is envisaged that the adoption of a suite of performance indicators across a range of highway assets will enable us to monitor the level of service the assets are providing.

As the HMP is mainly concerned with maintenance issues, the service standards in this revised document will refer to how quickly we react to fix those defects which meet our intervention levels or our success rate in carrying out a range of safety related inspections on time.

As the TAMP is mainly concerned with capital works that seek to restore the asset to an 'as new' condition, we are using objective condition data wherever possible to determine the overall condition of all our assets. Where condition data is currently not available, alternative means of measuring 'condition' have been adopted in the short term until such a time that suitable procedures are put to collect condition data. Currently the TAMP monitors condition by collecting information relating to:

- Street lighting columns greater than 40 years of age,
- Number of defects on the unclassified road network,
- Km roads RED or AMBER on A, B & C roads,
- Number of defects on the footway network,
- Average BCI score for bridges, structures and retaining walls.

Measuring and reporting our performance through the collection of condition data and recording defect response times will enable members, officers and stakeholders to gain a better understanding of how we are performing. We will be able to use this performance data to drive efficiencies through reviewing our systems, processes and material choices so we can seek out more efficient and effective solutions so as bring about continuous improvements to the highways service.
11) Lifecycle Planning

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

Lifecycle plans capture all information relating to the inventory, its condition and performance. They also identify both the short-term routine maintenance needs and long-term capital costs and enable annual spend profiles per asset to be produced. They also enable long-term predictions about the deterioration of various assets and their maintenance needs to be forecast and typically include information relating to:

- policy and strategy for maintaining the asset,
- list of specified goals and objectives the asset contributes to,
- extent of the asset and its characteristics, split into appropriate groupings,
- present condition including details how the data is measured, recorded and stored,
- current levels of service and costs associated with maintaining the asset at that level,
- details maintenance backlogs together with estimated quantities involved and cost of clearing such backlogs,
- comparison of current level of performance to the desired level of performance to enable 'performance gap' to be quantified and costed,
- details of alternative maintenance options costs for a range of alternative treatments to enable different investment strategies to be examined for best whole life costs and most effective way of narrowing the gap,
- details of the costs and risks associated with maintaining the asset at each of the defined service standards, including identification of risks associated with not maintaining to the desired standard
- consideration of future changes and demands placed on the asset e.g. for carriageways information on future HGV traffic levels will help to determine the performance that will be required in future years,
- prioritisation of maintenance schemes
- Improvement Plan to fill known gaps in knowledge e.g. asset, condition, costs and timetable / methodology for filling gaps,

Lifecycle plans also provide secondary benefits in enabling the 'institutional knowledge' i.e. the knowledge and judgement of key personnel, to be captured and documented, thereby enabling it to be shared and further developed. They also enable the County Council to gather information on the costs for each treatment option and the effect that this expenditure has on performance improvement year on year. Once these are known benchmarking can then take place with other authorities / treatments etc.

Lifecycle Planning recognises that there are key stages in the life of each asset type and that investment options need to be considered at each of these stages to ensure that each
part of the asset achieves its full expected life, at minimum cost. Each asset goes through the following stages during its lifecycle:

<table>
<thead>
<tr>
<th>Creation or Acquisition</th>
<th>Assets are created or acquired in response to either new development, to increase capacity or to improve performance.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine Maintenance</td>
<td>Carrying out minor works on a cyclical basis to maintain the asset in a serviceable condition.</td>
</tr>
<tr>
<td>Renewal or Replacement</td>
<td>Carrying out to return the asset to its &quot;as new&quot; capacity and condition.</td>
</tr>
<tr>
<td>Upgrading</td>
<td>Improve the asset above its original standard.</td>
</tr>
<tr>
<td>Disposal</td>
<td>Involves decommissioning, demolishing or selling old, obsolete or surplus assets.</td>
</tr>
</tbody>
</table>

The period each lifecycle covers will vary from asset type to asset type. Whilst a street lighting installation might have a finite life of approximately 30 years, a road or a structure should have a significantly longer life. However, during their operational life each of these asset types will have individual component or sections that need to be maintained, repaired or renewed at a point in time. Lifecycle plans therefore present a record, from creation to disposal of key work activities used in the management of the asset.

The County Council currently uses various software programmes to assist it with lifecycle planning. As a result a countywide video survey the whole of the adopted highway network has been recorded from various angles every 0.5m, from which all parts of the highway network have been placed into one of five condition categories;

- Grade 1 – Free from defects,
- Grade 2 – Signs of surface wear,
- Grade 3 – Mid-life,
- Grade 4 – Functionality impaired,
- Grade 5 – Structurally impaired.

The proprietary software enables the video condition data to be imported into data modelling software which can then be used to predict and optimise maintenance requirements for Lancashire's carriageways. The system also enables dynamic modelling of the lifecycle of the individual core ‘parts’ of a highway such as surface course, binder course and road base and their interactions.

It is anticipated that modelling and lifecycle tools will enable the County Council to evaluate, using graphical outputs and reports, the long term effects of a particular funding scenarios. The software will also enable long-term maintenance scenarios to be produced which detail the optimal treatment and associated cost to support whole of life management of the highways asset and enable the County Council to fully evaluate the maintenance backlog across the whole of Lancashire's highway network.
In addition the County Council has been collecting objective condition data relating to all the footways in Lancashire using a modified version of the Footway Network Survey (FNS) methodology which was developed by the Transport Research Laboratory to be a cost effective method of condition data capture that could be applied to the whole footway network and be repeated frequently enough to support good asset management. The FNS will result in individual sections of the footway network being placed into one of the four categories below,

- Condition Level 1 – As New
- Condition Level 2 – Aesthetically Impaired
- Condition Level 3 – Functionally Impaired
- Condition Level 4 – Structurally Unsound

The rating can change as often as necessary on a particular stretch of footway, reflecting variations along its length. This information is then summarised for the whole footway as the percentage of the footway in each condition level and can be broken down into surface types e.g. paving flags etc.

The asset management software system should enable us to further develop our lifecycle planning capabilities by extracting inventory/condition data using homogenous groupings to enable items that are of a similar nature to be grouped together for life cycle planning purposes. By grouping items that homogeneous by nature, and therefore are of a similar structure, likely to deteriorate at a similar rate and therefore have similar whole life costs, will enable us to analyse and manage our asset types more effectively.

From this we will be able to quantify current condition and quantity of each homogeneous asset group that is categorised as falling into each of the POOR, ACCEPTABLE, FAIR, GOOD or EXCELLENT service standards and over time we will be able to determine typical deterioration rates and project anticipated replacement quantities over a period of time.

Lifecycle planning enables further analysis of options to be undertaken as to the most cost effective treatment or remediation options and their success to be monitored over an extended period of time. When developing options, consideration needs to be given to the desired future performance of the asset, together with best practice guidance, legal and statutory requirements, County Council strategic priorities and objectives, customer expectations, engineering judgement, risk and financial considerations and new innovations.

The lifecycle planning process should be regarded as a continuous process that is reviewed on a regular basis so as to take account of new developments in relation to materials, treatments and legislation etc. Also any assumptions made about deterioration models, material/treatment performance need to be reviewed so that the relevant lifecycle can be updated as appropriate.

Whilst individual lifecycle plans will be produced, these cannot be regarding as freestanding as the level of resource provided for one asset may affect the funding available for others.
Therefore if a particular asset type receives insufficient revenue funding then routine/cyclic maintenance activities will be reduced which could accelerate the rate of deterioration and result in an earlier need for more expensive capital funded works to restore the asset back to an acceptable state.

The TAMP / HMP therefore have an important part to play in assessing the needs and demands across the highway infrastructure asset network so that scare resources can be allocated in the most effective manner so as to enable the required standards of service to be delivered.

In an attempt to strengthen our lifecycle planning processes the County Council has recently resurrected Highways Asset Material and Design Innovation Working Group whose terms of reference are ‘to establish policies, make significant and strategic decisions and to oversee all activities on the highway’. This group reports to the Highways Infrastructure Asset Management Strategy Board.

Membership of the Highways Asset Material and Design Innovation Working Group is drawn from different groups across the Authority and includes Highway Asset, Highway Services, Area Offices, Design, City Deal and Procurement. The main responsibilities of the group are to:

- Provide governance to all aspects of works on the highway including drainage
- Oversee the management of the highway and its assets
- Review existing policies and specifications related to highway surfacing, drainage and civils highway work
- Design and create new and improved ways of working in line with HMEP,
- Identification and trial of new products on the highway including drainage
- Review and renew all tenders for materials related to highway surfacing and civils highway work
- Introduce material testing consistency for all highway works

The working group will therefore be responsible for introducing a consistent approach to the use of materials relating to highway surfacing, drainage and civils highway work. They will instigate trials of new materials and monitor the performance of such materials.

The County Council recognises the value of lifecycle planning and separate plans have been developed for each major asset group. As lifecycle plans for some assets are more developed than others they will continue to evolve as the HMP is updated. As the County Council faces increasing funding pressures it is important that lifecycle plans are adjusted to reflect the impact of reduced revenue expenditure on long term planning and potential impacts on capital funding for the future.
12) Work Programming

The highway infrastructure network is facing unprecedented pressures arising from reduced resources, increased user demand, greater customer expectations and more extreme climatic conditions; mean we are facing a demand for intervention that far exceeds the resources available.

Both the TAMP / HMP recognise that all highway assets have an optimum intervention time that this varies according to where an asset is in its lifecycle and also the demands being placed upon it.

Capital Funded Work Programmes

Our capital spending priorities over the next 15 years are set out in the approved TAMP which outlines our strategy for managing our transport assets on a holistic basis. It recognises that as we can't do everything all at once we need to prioritise between our assets, based on the relative importance that each asset group contributes towards our goal of delivering an effective transport system, which is crucial if we are to help the businesses of Lancashire and achieve our broader economic, social and environmental goals.

We anticipate that from 2015/16 the level of available resources will allow us to focus on two asset groupings in each 5-year phase. As a result the TAMP identifies that our main priorities in Phase 1 should be the A, B and C road and the footway networks, in Phase 2 we will be focusing on the unclassified road network whilst structures and street lighting will be the priority in phase 3.

The table below shows the relative spending on each asset type in each of the three phases over the period 2015/16 to 2029/30.

<table>
<thead>
<tr>
<th>Asset Group</th>
<th>Phase I 2015/16 to 19/20</th>
<th>Phase 2 2020/21 to 24/25</th>
<th>Phase 3 2025/26 to 29/30</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B and C Roads</td>
<td>£8m</td>
<td>£3m</td>
<td>£3m</td>
</tr>
<tr>
<td>Footways</td>
<td>£3m</td>
<td>£1m</td>
<td>£1m</td>
</tr>
<tr>
<td>Rural Unclassified Roads</td>
<td>£2.2m</td>
<td>£5.5m</td>
<td>£2m</td>
</tr>
<tr>
<td>Moss Roads</td>
<td>£0.5m</td>
<td>£0.7m</td>
<td>£1m</td>
</tr>
<tr>
<td>Residential Unclassified Roads</td>
<td>£2m</td>
<td>£5.5m</td>
<td>£2m</td>
</tr>
<tr>
<td>Bridges</td>
<td>£3m</td>
<td>£3m</td>
<td>£6m</td>
</tr>
<tr>
<td>Retaining Walls</td>
<td>£0.5m</td>
<td>£0.5m</td>
<td>£0.5m</td>
</tr>
<tr>
<td>Street Lighting</td>
<td>£2m</td>
<td>£2m</td>
<td>£4m</td>
</tr>
<tr>
<td>Drainage</td>
<td>£2m</td>
<td>£2m</td>
<td>£3m</td>
</tr>
<tr>
<td>Structural Defects</td>
<td>£1.5m</td>
<td>£1.5m</td>
<td>£1.5m</td>
</tr>
<tr>
<td>Traffic Signals</td>
<td>£0.3</td>
<td>£0.3</td>
<td>£0.3</td>
</tr>
</tbody>
</table>

Whilst we will initially be concentrating on the A, B and C road and footway networks in the early part of this plan, we still intend to maintain our other transport assets as close to their 2013 condition as resources will allow by slowing down their rate of deterioration as far as possible by intervening as soon as possible. As a result it is unlikely that the maintenance
backlogs associated with the assets in phases 2 and 3 will be fully addressed until the appropriate phase starts.

Schemes of work are selected on a countywide basis and ranked within the capital works programme according to objective condition data that is collected either by road surveys or inspections. Where objective data is not yet available alternative data sources are used such as defect data etc. This process results in the Highway Asset Team producing an integrated programme of capital works for all transport assets which is implemented in County Councils Commissioning Plans and outcomes monitored via the County Council's Capital Budget Monitoring System.

10-year Forward Capital Programmes
A unified 10 year forward work's programming process will provide a single prioritised investment programme with a means of evaluating investments in different asset groups, in multi-asset group schemes or in whole-asset schemes on a common basis, so that the most beneficial receive the highest priority. With good quality condition data and the development of effective modelling techniques it should be possible to predict likely future maintenance and intervention requirements together with their location. Only by projecting forward the anticipated need and asset conditions can the best whole life options be identified. This programme should integrate the works required from all funding streams and initiatives. It will become the basis for improved co-ordination of works on the network and management of road space. Typical levels of confidence that may be achieved in a long-term programme are shown below.

<table>
<thead>
<tr>
<th>Year(s) Description</th>
<th>Confidence Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>Work is in progress 100%</td>
</tr>
<tr>
<td>Year 2</td>
<td>Firm recommendation 95%</td>
</tr>
<tr>
<td>Years 3 to 5</td>
<td>Reasonable assessment 75%</td>
</tr>
<tr>
<td>Years 6 to 10</td>
<td>Informed assessment 50%</td>
</tr>
</tbody>
</table>

The TAMP was approved in 2014, and so the processes for determining scheme selection are in their infancy and may be subject to amendment to reflect lessons learnt. It is proposed initially that a five-year ahead programme of work is devised, which in time is expanded into a 10 year ahead programme.

It is anticipated that the forward plan will present not only the general volumes of work, for example, kilometres of carriageway surfacing, and when they are to be required, but also an annual financial plan presenting the expenditure required to deliver the work plan. Once produced this proposed works programme can then be fed into the commissioning cycle.

In determining the forward work programme the County Council will seek wherever possible to:

- **Combine renewal/replacement scheme options for different asset types at the same location wherever possible** - this approach is likely to save traffic management
costs, minimise traffic disruption, reduce congestion, travel times and lead to lower operational costs through the sharing of vehicles, operatives and materials. It should also bring about environmental benefits;

- **Extend scope of renewal/replacement to include preventative maintenance where possible** – this approach will examine the potential to extend the scope or scale of a scheme option at the design stage, as it may be more cost-effective to carry out preventative maintenance to other asset components at the same location, at the same time. This is likely to save traffic management costs, minimise traffic disruption, reduce congestion, travel times and lead to lower operational costs through the sharing of vehicles, operatives and materials;

- **Design for future ease of maintenance and minimisation of costs** – this approach requires future designs to consider ways of delivering minimum whole life-cycle costs. Under this approach, an evaluation of subsequent routine and cyclic maintenance costs should be undertaken at the scheme option stage. Matters to consider should also include ease of access for future repair or replacement in the event of damage, deterioration or end of service life;

- **Determine scheme options that reduce risk and potential liability** – this requires risk assessments in terms of service levels, service delivery, safety and potential liability of the Council to be considered as part of the scheme selection process.

- **Identify district by district variation from the County standard** - this requires objective data on the condition of each category of the asset in each district and allows areas with assets in a better or worse condition than the County wide standard.

- **Allocate resources on the basis of relative need** - this allows resources available for each category of the asset to be allocated objectively on the basis of relative need in a transparent and easily understood manner.

**Revenue Funded Work Programmes**

The revenue budget is primarily used to maintain the highway infrastructure assets in a safe working order and is used to support works that can be categorised as being either cyclic/routine maintenance activities (grass cutting, gully cleaning, bulk lamp change etc.) or reactive maintenance activities (i.e. attending to highway defects such as potholes).

Cyclic/routine maintenance works have historically been identified using work schedules that set out on an annual basis for example, which gullies need to be cleaned or which verges need cutting and when. In the past, along with many other local authorities have responded to budget cuts by increasing the period between cyclic/routine maintenance visits as a means of saving money. The new 'Well Managed Highways' Code of Practice recognises that reducing budgets is severely affecting what works local authorities can afford to do and advocates a 'risk based' approach where assets are visited not according to
schedules, but according to risk. This new COP is due for release in summer 2016 and it is expected that all English local authorities implement its contents by summer 2018.

Section 58 of the Highways Act places a duty on all highway authorities to maintain the highway in a safe manner as possible having regard to:

- the character of the highway, and the traffic which was reasonably to be expected to use it;
- the standard of maintenance appropriate for a highway of that character and used by such traffic;
- the state of repair in which a reasonable person would have expected to find the highway;
- whether the highway authority knew, or could reasonably have been expected to know, that the condition of the part of the highway to which the action relates was likely to cause danger to users of the highway;
- where the highway authority could not reasonably have been expected to repair that part of the highway before the cause of action arose, what warning notices of its condition had been displayed;

Regular highway inspections are carried out through the adoption of a consistent countywide approach. The formalised Highway Safety Inspection System prescribes the frequency of inspections and the method of assessment and enables the County Council to:

- identify defects which meet the intervention criteria and trigger a repair or making safe of those defects,
- provide a defence under section 58 of the Highway Act 1980 and protect Lancashire County Council against the significant financial impact caused by 3rd party claims,
- provide evidence that Lancashire County Council has fulfilled its statutory obligation to maintain the highway in a safe condition,
- collect data in order to assist the management of the highway network,
- help meet Lancashire County Council’s objective to increase the proportion of planned maintenance.

In determining our priorities, we will need to take into account a variety of risks. The likelihood and consequence of which can be used to inform and support our approach to asset management and inform key decisions on performance, investment and implementation of work programmes. Our prioritisation of maintenance needs is set out below:

- safety issues,
- maintenance of the strategic road network,
- maintenance of the resilient road network,
- the residential network,
- other priorities
13) Asset Valuation and Whole Government Accounts.

All highway authorities in England are required to account for the value of their highway assets in their end of year accounts in a prescribed manner and format. In order to comply with these requirements the County Council has to calculate and publish the depreciated replacement cost (DRC) and the gross replacement cost associated with its highways asset.

DRC is a method of valuation that provides the current cost of replacing an asset with its modern equivalent asset, less deductions for all physical deterioration and all relevant forms of obsolescence and optimisation. GRC is based on the cost of constructing a modern equivalent new asset. The difference between the DRC and GRC is the amount of the value of the asset that has been consumed by the authority during its useful life.

Whole of Government Accounts (WGA) consolidates the audited accounts of over 5,500 organisations across the public sector in order to produce a comprehensive, accounts-based picture of the financial position of the UK public sector. WGA is based on International Financial Reporting Standards (IFRS), the system of accounts used internationally by the private sector.

WGA is a major step forward in transparency and accountability as it supports the government’s agenda to make more public data available. WGA enables the direct comparability of financial data across public sector entities and is producing trend data that will help to inform future analysis and decision making.

The WGA is independently audited giving both Parliament and the outside world greater confidence in the figures, and supports effective scrutiny by Parliament. This scrutiny has been exercised by the Public Accounts Committee who examine the accounts each year.

The production of information on a consistent basis between highway authorities, facilitates benchmarking and means that information can be aggregated to provide data at regional and national level on spending patterns and needs.

Within most authorities the greatest highway asset value lies within the carriageway network and in the number of bridges (and similar structures) that are maintained. Due to the complexity of the highway asset network and the fact that the combined value of these assets account for 97% of our highway assets it is not practical, or required to arrive at an exact depreciated value for the remaining assets within Lancashire.

We currently have very good condition for the A, B & C road network and for the Bridges and Similar Structures asset groups. As and when up to date and reliable condition data is collected for other asset types this will be used to improve the accuracy of our end of year accounts.
14) Asset Management Systems

In order to drive efficiencies through all parts of our operations we intend to make full use of modern technology including the latest software programmes and mobile technology. In order to achieve this the County Council is currently undertaking a review of all its core systems, including those used to maintain its highway assets.

A key part of the Core Systems Review is the use of technology based around the principle of an integrated, customer-focused solution supporting mobile working and end-to-end business processes which boost the on-going, major business transformation programme currently being carried out by the County Council.

As a consequence we are working towards replacing several different legacy ICT systems with one integrated highway asset management system which is scheduled to go live in 2016. It is anticipated that this will drive efficiencies across the County Council. The shift to digital services and self-service by members of the general public is a key strategy of the County Council and lead to back office efficiencies through:

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

The new Highways Asset Management System is an integrated solution for the management of infrastructure, including land, highways, structures, public lighting, and distribution networks. It will allow relevant users to:

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

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

It will manage the life-cycle of assets, and ensure that the required service levels are achieved and maintained across Lancashire. The full life history of assets then becomes available for management information with deterioration modelling techniques and cost/benefit analysis are utilised to evaluate different long-term strategies, and ensure optimum allocation of available funds.
The Street Works Register provides comprehensive functionality for both service utilities, highway authorities and traffic managers. Works may be initiated and progressed through a programmed life cycle which accommodates the functions of permission and co-ordination, aimed at minimising traffic disruption. This includes validation to conform to established noticing or permit rules. Facilities for Customer Service are provided in the form of referencing assets, report recording, action tracking, escalation, and document production.

LCC’s Strategic Network Management team (Highways) are already using the system which went live with in March 2014 and are using the Insight module to manage the coordination and monitoring of all works and other non-works activities such as licences and events within the County. Symology’s Insight Mobile software is also used by LCC’s Street Works Inspectors out in the field, and Insight will also be used by the County for Street Gazetteer and Additional Street Data Management.
15) Risk Management

Risk Management is an important part of both corporate governance and performance management. It allows the Council to avoid problems and failures, rather than just reacting to them when they arise. It helps the Council to identify where it needs to focus its efforts and resources, to exploit more opportunities and suffer fewer failures.

The Council adheres to the principles forwarded in the International Risk Management Standard (ISO:31000).

Under the ISO 31000 standard the definition of "risk" is no longer "chance or probability of loss", but "the effect of uncertainty on objectives" ... thus causing the word "risk" to refer to positive possibilities (opportunities) as well as negative ones (risks).

As part of the risk management process in the Council, these risks and opportunities are formalised and recorded.

Statement of Commitment
Lancashire County Council is committed to the management of risk.

Risk management is the identification, assessment, and prioritisation of risks, followed by the application of resources to minimise, monitor and control those risks in order to protect assets and minimise losses and liabilities.

Lancashire County Council is clear that the responsibility for managing risk belongs to everyone and that there needs to be an appropriate level of understanding of the nature of risk by all stakeholders.

The Council’s risk management approach offers a long term commitment, inherent to good governance practices and fully supported by the Members, Management and Officers of the Council.

Risk Appetite
Risk appetite is 'the amount of risk an organisation is willing to accept' by taking risks and exercising control over those risks.

The Council will not accept the following risks:
- Anything negatively affecting the safety of our Members, employees or customers
- Anything having a damaging impact on our reputation
- Anything leading to breaches of laws and regulations
- Anything endangering the future operations of the Council

The Council will also not accept any identified risk with a high risk rating of 12 or more, without listing it on the Corporate Risk Register and identifying mitigating actions.

Details of the County Council’s Risk and Opportunity Management Approach are outlined in the diagram below:
The Different Types of Risks and Opportunities the County Council is facing

<table>
<thead>
<tr>
<th>Type</th>
<th>Should Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political</td>
<td>- Health Reforms&lt;br&gt;- Election 2017&lt;br&gt;- Government Policy&lt;br&gt;- Local Policy&lt;br&gt;- Manifesto Commitments&lt;br&gt;- Upcoming social responsibility requirements</td>
</tr>
<tr>
<td>Economic (Financial)</td>
<td>- Procurement&lt;br&gt;- Budget&lt;br&gt;- Pension&lt;br&gt;- LEP&lt;br&gt;- Losing monetary resources or incurring unacceptable liabilities&lt;br&gt;- Meeting financial commitments, budgetary pressures, insurance considerations, consequences of investment decisions&lt;br&gt;- Effective management of finances through on-going austerity and increasing demand for services&lt;br&gt;- Budget reductions to expenditure.</td>
</tr>
<tr>
<td>Social</td>
<td>- Changes in residential trends&lt;br&gt;- Rising demand in social care&lt;br&gt;- Population growth rates, social mobility, lifestyle choices&lt;br&gt;- Social impact of terrorism&lt;br&gt;- Health - relationship and performance&lt;br&gt;- Crime and anti-social behaviour</td>
</tr>
<tr>
<td>Technological</td>
<td>- Council's capacity to deal with pace of technological change, use of technology to manage demand.&lt;br&gt;- Using new technology/systems to reduce costs and fulfil today's communications, accessibility and transaction requirements.</td>
</tr>
<tr>
<td>Legal</td>
<td>- Claims against the Council, non-compliance.&lt;br&gt;- Current of potential changes to law.&lt;br&gt;- Impact of inspections and whistleblowing and legal challenges.</td>
</tr>
<tr>
<td>Environmental (Community)</td>
<td>- Emergency Planning&lt;br&gt;- Business Continuity&lt;br&gt;- Pollution, contamination, climate and weather&lt;br&gt;- Environmental consequences of progressing the Council's objectives.&lt;br&gt;- Risks including climate change, extreme weather events, escape of water, flooding, coastal erosion, fracking sink holes, Heysham power station and waste management, with increased frequency and severity of loss, rapid and widespread infection/disease, affecting the health and well-being of a significant number of people over a large area.&lt;br&gt;- Lancashire Resilience Forum</td>
</tr>
<tr>
<td>Reputational</td>
<td>- Loss of public confidence&lt;br&gt;- Security breaches, police investigations&lt;br&gt;- Reputation management</td>
</tr>
</tbody>
</table>
| Organisational | • Transformation  
• Waste Management  
• Doing the wrong things as an organisation or missing opportunities  
• The business process of transforming from the existing model to the desired outcome, looking at innovative ways of meeting business objectives and service delivery  
• Internal risks affecting the organisation  
• Operational risks within services  
• Attracting and retaining the correct skills, performance and reward package  
• Loss of staff through sickness or resignation, health and safety issues  
• Data Protection, Freedom of Information, Information Security  
• Loss or inaccurate data, systems or reported information  
• Health and Safety |

### The Different Risk Categories

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Sub Category</th>
<th>When thinking about possible risks that could affect the different categories we consider the following areas:</th>
</tr>
</thead>
</table>
| Customers     | Customers    | • Poor impact of service on customers  
• Ineffective communication both within and external to the Council  
• Not consulting with the public or service customers |
|               | Citizens     | • Changes in demographic, residential or socio-economic trends  
• Detrimental effects on social wellbeing  
• Environmental consequences of progressing the Council’s strategic objectives  
• Detrimental impact of planning or transportation policies  
• Inability of the Council to meet its financial commitments |
|               | Regulators   | • Inability to cope with changes in National or European law or with satisfying regulatory expectations |
|               | Councillors  | • Failure to deliver either central or local government policy  
• Electorate dissatisfaction  
• Impact of election changes and new political arrangements |
|               | Partners     | • Partnerships breaking down; failing to deliver agreed outcomes  
• Poor partnership agreements/arrangements/relationships  
• Suppliers/partners are unable to provide effective, efficient and economic support to the Council, e.g. a major contract fails. |
|               | Processes and Systems | • Weakness in procedures or systems that could lead to breakdown in service or criminal activity  
• Failure in the health and safety process  
• Failure in the performance management process - thereby not knowing if objectives have been achieved  
• Ineffective inefficient and uneconomic delivery of projects  
• Change programmes, new ways of working, new policies procedures that will change the customer experience  
• Not doing a project  
• The Council does not comply with legislative requirements, e.g. health and safety, data protection, environmental legislation, employment law etc. |
| People (Employees) | • Not having the right number of staff with the right skills, e.g. issues relating to defining staffing levels, recruitment, retention and training.  
  • Loss of key staff  
  • Ineffective management arrangements e.g. attendance, performance and health and safety  
  • Lack of or inadequate management support e.g. poor communication, or lack of training |

| Finances and Resources | • Ineffective financial planning, budget preparation, budget management  
  • External funding issues including loss or reduction in funding and opportunities  
  • Attracting further funding where appropriate  
  • Inability to manage the Council’s cash assets  
  • How the Council manages monies it is owed in respect of service delivery, sales, fees and charges  
  • Poor management and control of resources including land, property, equipment etc. and the protection of the Council’s assets, e.g. fire and accident prevention  
  • Failure to ensure that the Council has appropriate insurance cover in place |

**Risk Management Mitigation Actions**

The Council adheres to the principles forwarded in the International Risk Management Standard (ISO:31000).

ISO 31000 is a family of standards relating to risk management codified by the International Organization for Standardization.

Under the ISO 31000, the definition of "risk" is no longer "chance or probability of loss", but "the effect of uncertainty on objectives" ... thus causing the word "risk" to refer to positive possibilities as well as negative ones.

ISO 31000:2009 gives a list on how to deal with risk:

* Avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk  
* Accepting or increasing the risk in order to pursue an opportunity  
* Removing the risk source
- Changing the likelihood
- Changing the consequences
- Sharing the risk with another party or parties (including contracts and risk financing)
- Retaining the risk by informed decision

Highway authorities are required to manage a variety of risks at strategical and operational levels. For each of the asset groupings covered by the TAMP and HMP the main risks associated with maintaining these assets have been considered and appropriate strategies put in place with regards the prevention of incidents via enhanced routine maintenance visits (e.g. gully cleaning), setting of defect intervention levels, prioritisation of remedial action and frequency / timing of inspections. The possible risks, consequences and outcomes of maintaining each of the asset groupings to particular service standards have also been considered.

In addition, the various policies and codes of practice that support the HMP cover the main operational and procedural risks associated with maintaining the Highways Asset Groupings.

The TAMP used a basic risk assessment criteria in determining which asset groupings to prioritise in which phase as illustrated below:-
<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Asset Volume or Size</th>
<th>Likelihood of Catastrophic Failure i.e., serious injury, loss of key asset, fatality.</th>
<th>Usage of Asset</th>
<th>History of critical safety defect</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B and C Roads</td>
<td>2,567km</td>
<td>Possible</td>
<td>Very High and economically critical</td>
<td>Medium/ Low</td>
</tr>
<tr>
<td>Rural Unclassified Roads</td>
<td>1,065km</td>
<td>Possible</td>
<td>Medium but significant to rural tourist economies</td>
<td>Medium</td>
</tr>
<tr>
<td>Residential Unclassified Roads</td>
<td>3,400km</td>
<td>Possible</td>
<td>High visibility</td>
<td>Low</td>
</tr>
<tr>
<td>Bridges</td>
<td>2,000</td>
<td>Remote</td>
<td>High (many thousand transits per day)</td>
<td>Very low (once in 10 years)</td>
</tr>
<tr>
<td>Footways</td>
<td>8,518km</td>
<td>Remote</td>
<td>High and users are vulnerable</td>
<td>360 occasions each year i.e. 1 per day</td>
</tr>
<tr>
<td>Drainage</td>
<td>Approx. 7,000km</td>
<td>Remote</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Street Lighting</td>
<td>165,000</td>
<td>Remote</td>
<td>High</td>
<td>0.008% less than one per month</td>
</tr>
<tr>
<td>Traffic Signals best estimate</td>
<td>331 junctions or 1,000 installations</td>
<td>Possible</td>
<td>Hundreds of thousands of transits per day</td>
<td>Common failure of traffic signals (approximately 2 per week)</td>
</tr>
<tr>
<td>Crash Barriers</td>
<td>Report being prepared</td>
<td>Possible</td>
<td>Thousands of movements per day across the network</td>
<td>Limited failure. No history of total failure</td>
</tr>
</tbody>
</table>

**Priority Network**

The County Council has also identified those assets which are considered essential for supporting the social and business needs of both the local and national economy, and which will have a consequence in the event of failure.

In order that the maintenance of these can be prioritised, a 'priority network' has been identified.
## Generic Service Standards

<table>
<thead>
<tr>
<th>Service Standard</th>
<th>Description of Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POOR</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Definition</strong></td>
<td>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:</td>
</tr>
</tbody>
</table>
| **a) Legal**     | • Unable to ensure that we carry out all those duties that are incumbent on the authority through law, statutory duties or mandatory requirements;  
                   • Insufficient allocation to carry out works to recommendations contained in relevant codes of practice for which there is no approved derogation;  
                   • Authority is more exposed to legal action up to and including corporate manslaughter;  
                   • Degree of risk may be mitigated by a robust risk assessment which describes the reasons for deviation from the code of practice. |
| **b) Safety**    | • In all cases **except** where the asset condition was formerly GOOD or EXCELLENT it is likely to result in a significant increase in the risks associated with safety or legal deficits;  
                   • Risks associated with the asset may be increased with attendant risks of legal exposure;  
                   • Likely to result in a significant increase in third party claims against LCC for personal injury and third party damage;  
                   • Heavy reliance on Safety Inspection regime to identify defects. |
| **c) Availability** | • Availability of entire network cannot be guaranteed;  
                         • Poor asset condition means parts of the asset may be withdrawn on a temporary or permanent basis to reduce the safety and legal exposure of the authority;  
                         • As no programmed maintenance work is undertaken assets may be withdrawn from service for some time. |
| **d) Condition** |                                  |
| Condition of the asset will quickly deteriorate as investment is not keeping pace with the maintenance requirements. This standard is not sustainable over the long term; |
| It is assumed that the rate of deterioration exceeds the under investment required to maintain condition by a factor of at least 50% i.e. investment £10m less than required means a depreciation of £15m in asset value. |

**e) Asset Value**

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

**f) Public Perception**

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

**g) Service Delivery**

- The principle focus is likely to be reactive maintenance with minimum or no preventative maintenance intervention to prevent asset deterioration;
- It will not be possible to address all issues rapidly and a prioritisation of service demands will be required;
- It is likely that increasing portions of the asset are removed from service and that the trend accelerates with time as the asset ages;
- An increasing backlog of maintenance issues will exacerbate the service problems and lead to a further chain reaction of deterioration;
- Depreciation in the asset value would be expected to exceed the under investment required to achieve a FAIR standard. It would be expected that initially deterioration would outstrip underinvestment by 50% with that proportion tending to increase year on year.
<table>
<thead>
<tr>
<th>ACCEPTABLE</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>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:</td>
</tr>
</tbody>
</table>

a) Legal
- The authority complies with the requirements of the relevant codes of practice in all key respects; any derogation is documented and supported by a robust risk assessment;
- We know what is required and how we deliver the requirements.

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

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.
### 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.

<table>
<thead>
<tr>
<th>FAIR Definition</th>
<th>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:</th>
</tr>
</thead>
</table>
| a) Legal        | - The authority complies with the requirements of the relevant codes of practice in all respects and a robust risk assessment exists, except where it chooses not to carry one out. In all such instances any derogation is documented and supported by a robust risk assessment;  
- We know what is required and how we deliver the requirements;  
- The legal exposure of the authority is reasonably controlled and robust systems are in place to provide supporting evidence of compliance with the code of practice. |
| b) Safety       | - Safety defects are well defined with performance standards for rectification of those defects;  
- Systems are in place to ensure proper assessment prioritisation and rectification of defects or temporary arrangements to mitigate risk until a permanent repair is possible;  
- We have relevant information to support our delivery to required performance standards. We are proactive in the identification and rectification of those defects;  
- In all cases except where the asset condition was formerly GOOD or EXCELLENT it is unlikely to result in an increase in the risks associated with safety or legal deficits. |
| c) Availability | - The majority of the asset is available for normal reasonable use; |
• Restrictions of the asset are largely planned maintenance activities rather than emergency repairs with the exception of emergency utility repairs.

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

e) Asset Value
• The asset value is likely to be depreciating as a result of other external factors rather than under investment.

f) Public Perception
• 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.

g) Service Delivery
• A mixture of preventative maintenance undertaken at the optimal time and reactive maintenance will be delivered although it is possible that outside pressure focuses some investment in areas which do not serve to improve the condition of the asset;
• The backlog of maintenance needs will probably be growing but at a reduced rate, due to any severe weather events and the reduction of our ability to focus on technically driven programmes.

<table>
<thead>
<tr>
<th>GOOD</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>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:</td>
</tr>
</tbody>
</table>

a) Legal
• The authority generally exceeds the requirements of the relevant codes of practice in key respects; any derogation is minor and defensible, documented, and supported by a robust risk assessment;
• We know what is required and how we deliver the requirements;
• We are able to defend legal claims robustly and develop a strong due diligence defence.

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 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.