

Highways Asset Management Strategy



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FOREWORD



Cheshire West and Chester Council recognise the importance of its highway infrastructure and how an effectively maintained and managed network contributes to the achievement of its corporate goals, in particular, to provide a well-connected and accessible borough. We understand that effective asset management is a platform to deliver clarity around standards and levels of service, and to make best use of its available resources. We have been working on the improvement of highways asset management and maintenance principles to ensure that we optimize all available funding to achieve maximum value for our residents and businesses.

This Highway Asset Management Strategy sets out how the Council will best manage our Council's highway asset, taking into consideration customer needs, local priorities, asset condition and best use of available resources. It addresses the highways asset as a whole, as well as articulating specific strategies for our major asset groups: carriageways, footways, bridges, structures, street lighting and traffic signals. These strategies will be used to inform the development of forward works programmes, in line with best practice lifecycle planning practice.

The scope of this Asset Management Strategy covers all highways asset management and maintenance activities that are currently funded through both revenue and capital budgets, and does not currently address traffic management and highways improvement schemes; however, the principles of good asset management adopted within this Strategy are applied consistently, regardless of scheme or work budget type.

The principles informing this Strategy have been set out in our accompanying Asset Management Policy, and will ensure that we adopt a long-term planning approach, and not just focus on the 'worst first' principle, but include an increasing focus on proactive, preventive maintenance works rather than a reactive and corrective works culture.

The Highway Asset Management Strategy will inform priorities for our business planning process and will support the continuous improvement of highway asset management itself.

COUNCILLOR KAREN SHORE

CABINET MEMBER FOR ENVIRONMENT



ASSET MANAGEMENT FRAMEWORK

The Asset Management Framework sets out the overall structured approach adopted by the Council in the ongoing long-term management of the highways asset. This Framework also demonstrates the alignment of our highways service with the objectives and approach set out in the Council's Plan 'Helping the Borough to Thrive'.

The purpose of this framework is to provide a structured, hierarchical approach to ensure all of the key ingredients are developed and implemented to deliver a professional highways asset management service. To anchor our improvement of Asset Management practices, we have developed process and guidance documentation that gives a consistent approach to the key elements of our management processes.

Organisational Context

This establishes the context for highways asset management in Cheshire West and Chester. The context links the Council's vision and priorities with the asset management mission and objectives.

Asset Management Policy, Strategy and Objectives

Outlines the key principles to be adopted, and the scope of assets covered by this Framework. The Asset Management Strategy sets out strategic planning of the policy and the strategy, but is also where the aspirations for the highways asset and the levels of service are defined. The communication strategy contains how we will communicate with our stakeholders both in giving information and seeking knowledge.

Tactical and Operational Planning

Aligned to the strategy and objectives, keeping with the principles as set out in the Asset Management Policy, this phase sets out the tactical and operational planning activities and where decisions are made which determine whether the strategic objectives are met. The typical outputs delivered through this phase include major asset type lifecycle plans and capital works programmes.

Implementation Enablers and Operational Delivery

Enablers are the activities which are required to support good asset management practice. Aspects such as Leadership & People, Asset Management Systems, Resources and Supply Chain, and Risk and Customer Communication are essential in successful delivery of a professional asset management service for the Council.

ASSET MANAGEMENT SYSTEMS

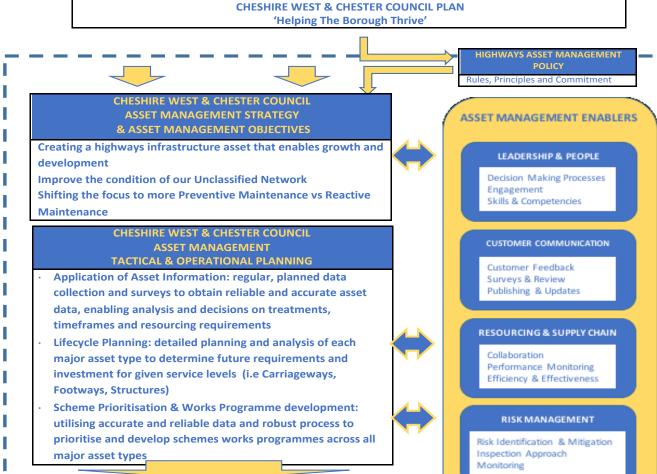
Functionality & Useability

Asset Data Strategy Process & Consistency



Highways Asset Management Framework

Political Commitment Council Members & Si Officers support	il Members & Senior Cheshire West & Chester Local			Stakeholder Expectations NHT customer surveys	
National Transport Po	ISO5500	Management Standards 00 Series / PAS55:2008 UKRLG HIAM Guidance		c <mark>ial</mark> Inding Model Entive Funding	
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ORGANISATIONAL OBJECTIVES & STRATEGIC PLANNING					
CHESHIRE WEST & CHESTER COUNCIL PLAN 'Helping The Borough Thrive'					



CHESHIRE WEST & CHESTER COUNCIL OPERATIONAL SERVICE DELIVERY

- · Safety & Serviceability Inspections
- · Routine & Cyclic Maintenance Programme Delivery
- Delivery of Projects Capital Programme Delivery
- · Highways Asset Management Improvement Action Plans

HIGHWAYS ASSET MANAGEMENT FRAMEWORK



ASSET MANAGEMENT POLICY

Cheshire West and Chester Council is committed to implementing a Best Practice Asset Management approach for our highways network that supports the successful delivery of our Vision of 'Helping the Borough Thrive'.

We have the responsibility for managing over 2,280 kilometres of carriageway and 2,648 kilometres of footway, including all the associated assets such as street lighting, bridges, structures, and drainage, making this network by far the most valuable corporate asset, currently valued in excess of £5 billion. In order to realise the optimum value to the people that utilize this network and as the highways authority, it is crucial that we provide a professional, well-informed, intelligent, and forward-looking approach to how we manage and operate our highways.

We have set out the following principles that we will adopt when developing and implementing this asset management approach.

Service delivery focused

- Our asset management approach is driven by an aim to improve and support service delivery for the Council and the people who live, work and invest in our borough; and
- The asset management decisions we make are based on assessment of service delivery requirements, utilizing and maintaining a safe, serviceable and sustainable highways network.

A whole of lifecycle approach

- A whole of lifecycle approach, recognising the value of input to planning asset investment and management decisions; and
- Carry out asset lifecycle planning of the physical assets to understand the level of funding
 we actually require to maintain the infrastructure, over the asset's lifespan and monitor
 annual financial investment in the assets.

Informed decision making

- Using our asset information systems to enhance our knowledge of current assets so that decisions can be made with greater confidence of asset performance and value; and
- Asset management decisions will be made through an increasing level of information of assets and their evaluated performance.

Responsible and accountable

- Ownership, control, accountability, responsibility and reporting requirements for assets are established that are relevant, clearly communicated and implemented;
- Asset information management systems are maintained at levels that meet organisational and Council financial reporting requirements; and



 Asset-related risks are considered and provide input to the strategic, tactical and operational planning process.

Consistent with national and local government policies and priorities

- All asset management activities are undertaken as part of Cheshire West and Chester's overall resource allocation and management framework; and
- Adopting national and local standards and policies when applying our asset management approach.

Building resilience to Climate Change & Environmental challenges

- Take into account emerging challenges with managing climate change impacts and how they relate to managing assets; and
- Building a more resilient approach to managing and improving assets.

We will comply with these principles through the successful development and adoption of strategies, plans and processes that will:

- Define desired levels of service for highways assets, in close consultation with stakeholders;
- Adopt a life-cycle approach to planning asset investment and management decisions
- Balance competing network needs across the various asset types to best meet the desired levels of service;
- Identify and manage the risks associated with operating the highways network to ensure continuous service;
- Establish, monitor and evaluate effectiveness of both service delivery and asset performance;
- Develop a strong organisational capability for long term asset management;
- Adopt a continuous improvement approach to asset management policies and practices;
 and
- Manage the highway network in a way that reduces occupation by statutory undertakers.

This Policy provides a clear set of principles for the development and implementation of all related policies and practices that support the delivery of the highways service. These principles should be taken into account as practices and processes mature and improve.

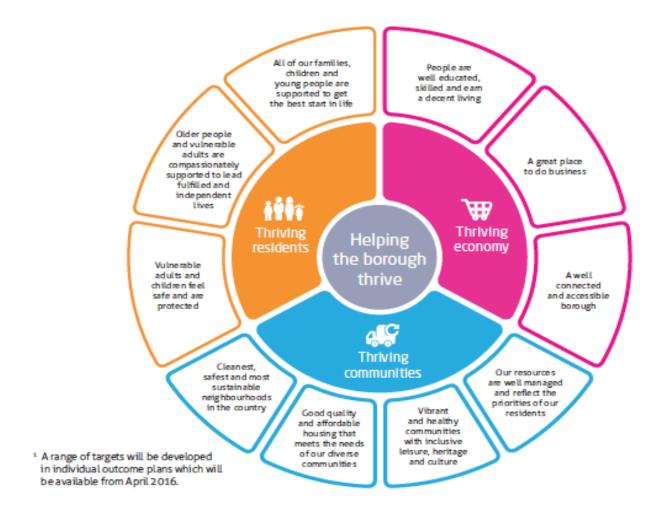
This Policy shall be subject to annual review, or at an interval appropriate relating to a change in network characteristics, usage, or undergoing any significant impact from either external influences or organizational developments.

ALIGNMENT TO CHESHIRE WEST & CHESTER CORPORATE OBJECTIVES

Given the value of the Council's highways asset (currently valued at a replacement cost of over £5 billion), it is critical that we optimize the value that this network can provide the



Council and its residents. In order to ensure that the most effective use of the network is delivered, this strategy will provide a clear 'Line of Sight' with the Council's corporate objectives and link closely with the published Local Transport Plan (2011-2026). As described in more detail in the Council Plan (2016-2020), one of the key priorities that most specifically relate to our highways service is "Thriving Economy Priority No. 10: A Well Connected and Accessible Borough" (described below). Whilst this aspect includes more than just highways infrastructure (e.g. public transport assets, broadband and communication infrastructure), this provides the greatest element of alignment for the wider council services. It should be noted that our highways service supports the successful delivery of the key themes of Thriving Residents and Communities in some form.



As described in more detail below, it is critical that the highways asset is managed in the most effective and efficient manner possible, in order to deliver these corporate objectives.



10. A well connected and accessible Borough

What this means and why it is important

Having appropriate methods and mechanisms of transport is essential to the success of Cheshire West and Chester, having a real impact on the quality of life of local residents, while also bringing economic growth to the area. Road transport links, particularly from West to East are congested and in need of modernisation and new infrastructure is needed to support growth in key areas. Existing levels of delay on key routes, makes Transport for the North's ambition of 'mile a minute' journeys particularly difficult without further and sustained investment. Much of the rail network is in need of modernisation, with poor service patterns, line capacity issues, and poor quality rolling stock. This limits the operation of intra-connectivity in the sub-region and to key economic centres and international gateways across the north-west, Northern Powerhouse and further afield towards Birmingham and London. The risk is that unless this is addressed the area will not exploit its geographical position in the North.

Residents and wider partners recognised the need to be better connected to the wider region and to tackle congestion. Public transport in particular was seen as an area for improvement and vital for isolated communities.

We are also aware that residents are living their lives online more than at any point in history. It is important that the Council adapts to account for this change, and to fit in with modern lifestyles by enabling more services to be accessed online. This 'digital revolution' will make our services more convenient to residents, and shape them around their needs. By 2020, it is expected that residents who prefer to use digital means to transact and communicate will be the vast majority with just 15% as non-users.

There is a growth in internet usage, particularly across less affluent groups with the rise of smartphone and more ubiquitous internet access. Interestingly, age is becoming less of a barrier to participation and currently more people in the 66-79 age bracket use Council websites than the 30-39 age bracket.

What success will look like by 2020

If we are successful, by 2020 we would expect to see:

- Improved resident satisfaction with roads;
- Fewer road traffic injuries;
- Increased availability of superfast broadband;
- Residents tell us that access to services has improved; and
- Higher number of residents accessing services online.



The Cheshire West & Chester Local Transport Plan (LTP) has been adopted to cover the planning period from 2011 to 2026, and sets out some long term objectives for the management and operation of the Borough's highways and transport network. Whilst this LTP covers all aspects of land transport within the local authority, the management of the highways asset clearly has a major role to play in the achievement of these objectives.

Provide and develop reliable and efficient transport networks which support sustainable economic growth in West Cheshire and the surrounding area.

This includes plans to:

- Reduce traffic congestion problems;
- Develop transport schemes that help support the local economy;
- Support the delivery of new developments and housing while limiting the impact of additional traffic; and
- Improve links between West Cheshire and surrounding areas particularly to Merseyside, Greater Manchester, North East Wales and to local airports.
- * Reduce carbon emissions from transport and take steps to adapt our transport networks to the effects of climate change.

This includes plans to:

- Improve and encourage the use of sustainable (low carbon) transport;
- Promote the use of new technology and alternative fuels to reduce carbon emissions from transport;
- Ensure that new development takes place in accessible locations which minimise the need for travel; and
- Ensure that local transport networks are resistant and adaptable to the impacts of climate change, including adverse weather conditions.
- Manage a well maintained transport network.

This includes plans to:

- Improve the condition of the highway network;
- Reduce the maintenance backlog;
- Maintain the highway network in a safe and serviceable condition for the use of vehicles, cyclists, pedestrians, equestrians and all other road users; and
- Ensure that the highway is kept in an acceptable condition environmentally.
- Contribute to safer and secure transport in West Cheshire and to promote types of transport which are beneficial to health.

This includes plans to:



- Reduce the number of people killed or seriously injured on our roads;
- Encourage healthier lifestyles by promoting more active forms of transport such as cycling and walking;
- Reduce transport related air quality problems in the Borough;
- Ensure that new transport schemes improve public safety and help reduce fear of crime; and
- Plan for and respond to incidents which may have a significant impact on the transport network.

Improve accessibility to jobs and key services which help support greater equality of opportunity.

This includes plans to:

- Ensure that new developments and local services are built in accessible locations;
- Work to improve transport links to employment and training opportunities, to key services
- from rural areas, and to health services; and
- Improve physical accessibility by removing barriers to mobility especially for disabled and older people.

Ensure that transport helps improve quality of life and enhances the local environment in West Cheshire.

This includes plans to:

- Ensure that new transport schemes complement local character and enhance the built and natural environment and biodiversity;
- Promote access to leisure activities by improving pedestrian, cycle, greenway and Public Rights of Way networks; and
- Work to reduce noise levels that arise from transport.



STRATEGIC ASSET MANAGEMENT OBJECTIVES

In addition to the Organisational Context established in the Asset Management Framework, the following Strategic Objectives have been determined following consideration of:

- Customer and key stakeholder expectations
- Current asset performance and condition
- Existing and potential future funding and investment profile for the Council
- Emerging technology and recognized best practice asset management

OBJECTIVE 1:

PROVIDING A HIGH LEVEL OF CUSTOMER SATISFACTION WITH OUR APPROACH TO MANAGING OUR HIGHWAYS

We understand that we manage and maintain the highway assets for the benefit of the residents and businesses of the borough and for those that travel into and through the borough, and that it is these stakeholders that provide the required funding, through central government grant and the Council's own funding sources. We will seek to develop practicable ways to determine the level of service our stakeholders require of the highway assets. Our goal is to improve public satisfaction with its highway service whilst maintaining value for money and continuing to provide a safe highway network, in line with corporate priorities.

We will make sure that the way the highway network is performing is communicated to all stakeholders, using the most appropriate media.

OBJECTIVE 2:

ENSURING WE PROVIDE A RESPONSIVE SERVICE AND EFFECTIVE WORKS DELIVERY

In order to optimize our investment funding for highways management, we are committed to improving, or minimising the deterioration, of the condition of our highways asset located within our unclassified network. This typically includes smaller, less-trafficked rural roads, and neighbourhood streets which provide crucial links and shorter length journeys for our residents.

OBJECTIVE 3:



COMMITTING TO DELIVERING BETTER VALUE FOR MONEY THROUGH IMPROVED ASSET MANAGEMENT

Continuing the work from previous years, Cheshire West and Chester Council will further expand our level of preventive maintenance works where appropriate, in order to ensure we extend the life of our critical assets. This will typically include undertaking preventive maintenance treatments on our carriageways and footways for surface dressing, microasphalting works, and other similar treatments. This preventive approach will be delivered hand-in-hand with ongoing renewal and improvement works to our highways asset.

OBJECTIVE 4:

STRENGTHENING OUR HIGHWAYS ASSET MANAGEMENT CAPABILITY

We recognize that in order to achieve our strategic objectives and deliver an improving long-term asset management service for our stakeholders, we must consistently strengthen our overall asset management capability within our highways service. This is why we have nominated this objective; which allows us to continue to focus this enabling function. This capability will be strengthened across a number of different facets, including our own people, processes and systems, and those of our supply chain and partners. Training and competence is a strong aspect of developing our own people and we will strive to ensure we provide our team with the required level of training, guidance and support.

PRINCIPLES BEHIND OUR STRATEGIC OBJECTIVES

The strategic objectives above reflect the current economic climate where highways funding is under extreme pressure, and must be prioritised according to these objectives. Should this change in the near future, a review of strategic objectives will be undertaken to ascertain any changing priorities or objectives.

We will adopt the following principles in line with our strategic objectives:

A STRATEGIC APPROACH OVER THE LONG TERM

The Council as highway authority will be the custodian of the borough's highway assets into the future; we understand that the way we manage and maintain those assets today will have effects on the way they will have to be managed and maintained in the future. We, led by senior decision makers, but including all those involved in the highways operations, whilst complying with our statutory obligations, commit to avoid expedient repairs and treatments that would only defer problems.



We will make use of best practice whole life cost analyses when making engineering decisions for repair and treatment options.

In line with national guidance and good practice, Cheshire West and Chester is developing a lifecycle approach to managing its highway maintenance activities. Understanding how long specific maintenance treatments last, the relative cost of these treatments and the Levels of Service (LoS) developed are essential pre-requisites to good asset management.

One of the main aspects of our asset management approach is to manage the combination of all highways budgets with the various possible methods of highways repair and maintenance to best target the areas actually needing intervention at the optimum time, using a planned approach to maintain each highway or class of highway at an agreed condition standard. This agreed condition standard would be tempered according to the actual and likely available funding, whilst ensuring safety.

A SYSTEMATIC APPROACH

Our approach to managing and maintaining our highway assets will be holistic and end-toend. That is, we will always consider how our repair and maintenance of one particular asset or asset group impacts on other assets. Also, we understand that the way we carry out reactive repairs and routine cyclic maintenance to assets has an effect on their ultimate service life. We will always look to optimise this relationship.

We will regularly review the computer systems and databases we use to aid our asset management decisions. Where shortcomings are identified or new technology becomes available we will adopt a business case approach to ensure that any financial investment will provide a proper return.

MANAGING EXPENDITURE OVER THE ASSET LIFECYCLE

We are adopting a whole-of-life approach for all of our major asset groups, including developing and implementing Lifecycle Plans for each group. Using detailed analysis of these assets, we are able to better understand predicted long-term performance of these assets, model different scenarios for budget and investment against varying treatment options and performance criteria.

As a result, we will maintain Lifecycle Plans for carriageways, footways, bridges, structures, and street lighting and traffic signals as a priority, we will determine further lifecycle planning requirements as the Council's asset management maturity levels increase.

MEETING PERFORMANCE REQUIREMENTS



In conjunction with the setting of levels of service, for individual assets and for the network as a whole, we will collect, process and report performance data so that all stakeholders can see whether targets are being met. We will incorporate improvements by adopting the Department for Transport's Highways Maintenance Capital Funding for the Incentive Fund, and other related, relevant guidance developed by the Highways Maintenance Efficiency Programme (HMEP)

We will, where practicable, look to benchmark our performance against other highway asset owners.



OUR EXISTING ASSET & CONDITION

ASSET CONDITION OVERVIEW

The below table provides an overview of the quantum and condition of our major asset types.

Further detail and description of Desired Outcomes and Proposed Strategies is defined in Section 7 – Strategy for Main Asset Groups.

Asset type	Quantity	Condition
Carriageway	2,280km	The investment in the highway network by CW&C funded Asset Recovery continues to show an improvement in the condition of the highway network, with a further reduction in the %lengths of highway that require major works. Comparative data from 14/15 shows CW&C are in first quartile for A roads (i.e. roads requiring the least major works) and the second quartile for B, C and unclassified road.
Footway	2,648km	A significant proportion of the footway network is past its desired service life when comparing design life to our current programmed replacement/renewal
Structures	392 Bridges	An increasing aging profile for our bridge stock, along with
	87 Retaining Walls	a number of 'weak' bridges that require a programme of strengthening and replacement. Within existing funding
	City Wall:	envelope, managing a declining condition profile
	115 Structures	
Street	44,150	Approximately 15% of the lighting columns are
Lighting		assessed to be over 30 years of age. Although current columns have a design life of well in excess of 30
(including		years, approximately 50% of our concrete lighting
illuminated		columns are in this age group and can be considered to
signs and bollards)		be at or near end of their useful life, and consequently present a higher risk of failure.
Traffic Signals	128 Signalised Junctions	Generally good condition across the borough, however, there are a number of signalised junctions with asset components that are reaching critical age and will require regular planned maintenance activities to ensure no further deterioration.



The table below provides an overview of the Asset Valuation outputs from the Whole of Government Accounts reporting process undertaken annually. This shows both Gross Replacement Cost (that is, the cost to replace the highways asset to a 'new' modern equivalent condition, and Depreciated Replacement Cost (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 impairment).

Asset Group	GRC '000s	DRC '000s	Date Last Valued
Carriageways	2,150,683	2,092,025	2016/17
Footways & Cycleways	329,702	299,156	2016/17
Structures (excluding City Wall)	803,544	403,084	2016/17
Street Lighting	93,639	57,363	2016/17
Traffic Signals	26,378	9,338	2016/17
Street Furniture	20,365	10,176	2016/17
TOTAL	5,065,909	4,317,539	



STRATEGY FOR MAIN ASSET GROUPS

CARRIAGEWAYS





As Highway Authority, we maintain the following lengths of carriageway:

-	A Roads	327 km
-	B Roads	142 km
-	C Roads	498 km
-	Unclassified Roads	1313 km
_	Total	2280 km

This is a total distance which would stretch by road from Chester to Rome.

Road Classification by Length (km) 1400 1200 1000 800 600 400 200 0 A B C U/C Road Classification

Of the above total, 50% are classed as Rural, having a speed limit of over 40mph.

CURRENT CHALLENGES:

To maintain a steady state condition of the highway carriageway network within a diminishing funding envelope. Maximising the available funding from DfT Incentive Fund through improved asset management and delivery practices across the service.

DESIRED OUTCOME:



Sustain the overall condition of the highway network at an acceptable level that will not fundamentally change the efficiency or economic accessibility. In line with overall strategic objectives to focus on improving the effectiveness of our maintenance spend to generate optimum growth and development.

PROPOSED ASSET STRATEGY:

Lifecycle Planning will be adopted to establish a baseline funding requirement for the network. As a result, investment shall be targeted where the money will return greatest whole life cost.

As a principle, maintenance should be undertaken just before the onset of rapid deterioration and before structural treatments are necessary. Resurfacing and surface treatment only is desired.

On the rural minor network particularly, we will establish a cyclical approach to surface treatment which is conservative in order to protect against water ingress and localized rapid deterioration.

Optimise the intervention point at which the maximum benefit can be achieved from preventative maintenance. Development of a three to five-year programme of preventative treatments aligned with a matching structural and resurfacing programme.

FOOTWAYS





Our current footway inventory is shown below:



FOOTWAY HIERACHY	FOOTWAY LENGTH	FOOTWAY WIDTH	CALCULATED AREA
	(km)	(m)	(m²)
1a Urban	4	4.00	16,000
1 Urban	29	3.8	110,200
1 Rural	0.0	0.0	0.0
2 Urban	437	1.9	830,300
2 Rural	0.0	0.0	0.0
3 Urban	818	1.8	1,472,400
3 Rural	0.0	0.0	0.0
4 Urban	105	1.9	199,880
4 Rural	1,254	1.7	2,132,820

This hierarchy is based on the Well Maintained Highways Code of Practice for footways as shown in the below table:

Table 2 – Footway Hierarchy				
Category	Category Name	Description		
1(a)	Prestige Walking Zones	Very busy areas of towns and cities with high public space and streetscene contribution.		
1	Primary Walking Routes	Busy urban shopping and business areas and main pedestrian routes.		
2	Secondary Walking Routes	Medium usage routes through local areas feeding into primary routes, local shopping centres etc.		
3	Link Footways	Linking local access footways through urban areas and busy rural footways.		
4	Local Access Footways	Footways associated with low usage, short estate roads to the main routes and cul-de-sacs.		

7.2.1 CURRENT CHALLENGES:

A large proportion of the footway network consists on flags or paviours which are particularly susceptible to damage by vehicle overriding.



There are a variety of footway surfaces, flexible (bituminous macadam) and rigid (paviours) within Cheshire West & Chester, each of which requires a different approach to maintenance. The flexible surface footways have a programme of preventative maintenance and renewal. The rigid surfaced are particularly susceptible to damage from vehicle overriding and fall into two broad categories: 1) housing estates where there is an ongoing programme to replace flags with a flexible surfacing and, 2) city or town centres where flags may be used for aesthetic purposes or appropriate to the existing environment (example York stone flags in Chester). These are particularly expensive to maintain should they be disturbed by vehicles (Lorries, mechanical sweepers), street works or any process that removes the jointing material between flags (example pressure washing), though some of these may be shared surfaced areas (pedestrianised with delivery vehicle access) they still account for a number of "trips and falls" insurance claims, especially those with the high level of footfall.

One of our current challenges is obtaining updated condition information on our footway asset, and in line with asset data and information strategy, we have actions in place to update both our inventory and condition for footways over the next 2 years.

7.2.2 DESIRED OUTCOME:

Improve City and Town centre footways (pedestrian areas) to increase footfall to businesses, continue this process in satellite shopping areas. Reduce "trip and falls" claims on modular and flag.

7.2.3 PROPOSED ASSET STRATEGY:

Adopting preventative treatment on Rural Footways (hierarchy 4 footways) where necessary, in order to extend asset life and minimise major repairs in the near term. A more rigorous assessment of whole life cost analysis and justification prior to any new locations using "unique" surfacing. Working closely with other services within the Council, review street cleansing protocol to minimise damage to flagged areas of high footfall.



BRIDGES & STRUCTURES

Our current inventory of bridges, retaining walls and related structures are broadly summarized as below:

Highway Structures

- 392 Bridges (span greater than 1.5m)
- 87 Retaining Walls (retained height greater than 1.5m)

City Walls

115 Structures

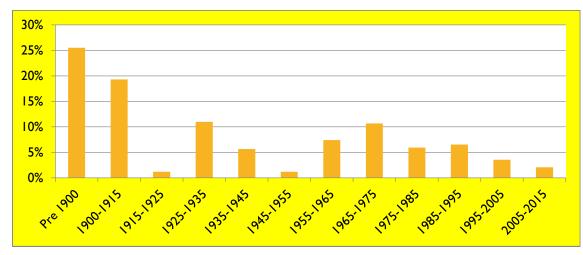
Chester City Walls which is a Scheduled Ancient



Monument is a valuable and challenging highway structures asset; comprising 115 identifiable structures, including walls, footbridges, staircases, postern's and towers. This asset attracts significant priority in ensuring it retains a safe and serviceable condition. To this end, our highways service bridges and structures team are currently developing a separate strategy and lifecycle plan for the City Walls to meet customer's expectations.

CURRENT CHALLENGES:

Our oldest registered bridge (see photo above) was built in 1339 at Farndon. From the table below it can be seen that approximately 45 percent of our highway bridges are over 100 years old.



Age profile of

Cheshire West and Chester Council's Highway Bridges

The number of assets is increasing, at a relatively slow rate, due to the adoption of infrastructure associated with new developments

DESIRED OUTCOME:

Our required outcomes for the bridges and structures asset are to:



- Adopt inspection and maintenance strategies that extend the working life of our ageing highway structures stock.
- Undertake a programme of bridge strengthening to address a number of identified 'weak' bridges owned by the Authority and those where we have a legal financial liability such as some Network Rail weak bridges within the next 20 years.

PROPOSED ASSET STRATEGY:

Our principle strategy is to effectively manage our increasingly aged asset profile, through strengthening and well-timed interventions. Focus will also be given to those structures located on our strategic and resilient network, whilst causing minimal disruption or lower level of service to our customers.

We currently have a fully developed work bank for all of our structures that uses a red, amber, yellow and green system to prioritise maintenance works. This feeds into our 50-year lifecycle plan to produce a detailed overview of the future maintenance requirements of our asset stock.

By the use of whole life costing and lifecycle planning we aim to increase the levels targeted preventative maintenance such as regular routine maintenance and major interventions.



STREET LIGHTING & TRAFFIC SIGNALS





Asset Type	Number	Comments
Street lights	44,810	Columns, lamps, cabling, feeder pillars, wall mounted lanterns and sub-way wall lights.
Illuminated signs and bollards	5,003	Includes Refuge Beacons
Signalised Traffic Junction	128	Signalised junctions, cabling, feeder pillars, SCOOT and UTMC systems.
Signalised Pedestrian crossing	93	This includes PUFFIN, TOUCAN and PELICAN controlled crossings.
Zebra Crossings	96	
CCTV for Traffic monitoring	8	Pan and tilt monitoring camera
Electronic signs	190	School wig-wags, School Amber Flasher, VAS and VMS

CURRENT CHALLENGES:

Approximately 15% of the lighting columns are assessed to be over 30 years of age. Although current columns have a design life of well in excess of 30 years, approximately 50% of our concrete lighting columns are in this age group and can be considered to be at or near end of their useful life, and consequently present a higher risk of failure.



DESIRED OUTCOME:

Manage a cost-effective replacement programme for low energy lanterns for the whole council. Within the existing funding envelope, develop and deliver a maintenance and replacement programme for all existing concrete columns.

PROPOSED ASSET STRATEGY:

We are currently implementing a major replacement programme for our lanterns which will significantly reduce our current energy charges, and this forms part of our short-medium term strategy. Also, given the large number of concrete columns that remain in our borough, we are adopting a managed replacement programme to reduce these numbers before they reach a critical or deteriorated state. Our approach to traffic signal systems is to maintain steady state condition, with ongoing preventive maintenance treatments to extend asset life and retain high operational performance.



COMMUNICATION

In order to determine future levels of service and to enable informed decision-making based around priorities it is essential that robust customer engagement be undertaken. It is also critical that our highways service ensures it delivers a clear and concise message regarding the ongoing management of Cheshire West and Chester's highways network. This will be addressed in several ways, through several means; the below outline Communication Strategy sets out the WHY, WHO, WHAT and HOW of our highways service message.

OUR COMMUNICATION GOALS

In terms of communicating the work we do, and how we plan for work in the future, we've outlined a number of key objectives to be achieved through effective communication of our service:

- To provide clear and plain English information that informs people of what we do, how we do it, and what our plans for managing the highways service are in the future
- To give people information on the how decisions to spend money are made, and how we'll use this funding to get the best outcomes for the wider Council
- To ensure we provide a timely, clear and consistent message to all stakeholders about our highways strategy, plans and programmes
- To actively listen to our stakeholders to understand their needs, and use this feedback and input to inform future service decisions
- To gain support, sponsorship and commitment from our leaders, including Council members and senior officers, so that we can deliver a high quality highway asset management service

OUR KEY STAKEHOLDERS

We believe in regular and informative communication with our stakeholders to ensure we receive feedback and input, as well as share useful information regarding the delivery of our service, both for now as well as for the future. To that end, we have developed a number of stakeholder groups, both internal and external, that allows us to better tailor our message and understand the nature of any customer or stakeholder engagement. This list of key stakeholders is shown below:

Internal Stakeholders:

- Cheshire West & Chester Council staff;
- Council Members:
- Service Provider (Maintenance Contractor Ringway) staff; and
- Other Service Provider staff, subcontractors and supply chain partners.

External Stakeholders:

Local road users;



- Residents;
- Local communities;
- Local CW&C businesses;
- Cheshire West & Chester Chamber of Commerce:
- Emergency services (Police, Fire, Ambulance);
- Utility Companies;
- Special Interest groups such as freight associations, pedestrian groups, cycling and motoring groups;
- Disability and mobility groups;
- Other Council services e.g. Housing, Education, Health, Treasury, etc;
- · Schools:
- Town and parish councils;
- Neighbouring highway authorities;
- Midland Service Improvement Group (MSIG);
- Business Improvement Districts (BIDs); and
- Travelling public, business and leisure.

The introduction of the Asset Management Framework and the overall proactive, planned approach will be communicated not only to those who live and work in the borough but also to Members and other Council officers. This will explain the drivers behind the Council's approach to highway asset management.

It is also recognised that the successful implementation of Cheshire West & Chester's Asset Management Framework will rely heavily on the many council officers and supply chain partners responsible for the delivery of the service. As such, a key platform of this implementation process is the effective communication of the Asset Management Framework and its components throughout the workforce and suppliers. A series of workshops and meetings is being developed to deliver some of these key messages through presentations and discussion forums, and will be included as standard agenda items on future meetings to ensure that this approach becomes 'Business as Usual' to Cheshire West and Chester staff.

KEY MESSAGES TO COMMUNICATE

We will communicate aspects of our highways asset to both internal and external stakeholders, along with the challenges that such a large and complex asset base demands. This provides a meaningful context to the nature of our service, allowing the important message associated with our overall and asset-related strategies to be clearly communicated. We will manage key messages to reflect the appropriate Council Plan outcomes.

As the Highway Authority, Cheshire West and Chester Council have a statutory duty to maintain and operate the highway network on behalf of all its users and residents. Our objective is to provide this duty by operating an efficient and effective service, complying with legislative, statutory, quality and sustainability requirements. We also must ensure that 28



we fulfil this duty without any compromise to the health and safety of any of our employees or customers.

Our communication message is to highlight and emphasise the achievement of our key strategic asset management themes for the highways asset:

- A strategic approach over the long term
- A systematic approach
- Managing expenditure over the asset lifecycle
- Meeting performance requirements

HOW WE COMMUNICATE

We currently utilize a number of different media to communicate our highways service, and we will continue to do, adopting a more technology-driven focus to provide our residents and road users with up-to-date and accurate information in relation to our service. We have outlined a number of different ways we communicate aspects of our service, and decisions on how best to utilize these media forms will be taken on a continual basis, depending on the type and form of message required.

We will utilize, where appropriate, local media forms such as press releases, radio, television and print media to provide briefings and information in relation to our highways service. Where possible we will use multiple channels to engage the widest range of stakeholders.

Increasingly, the use of digital media, principally through use of our Cheshire West & Chester and Your Streets websites, and social media forms such as Twitter, Facebook, Flickr and YouTube to relay information regarding our highways service. Clearly, these forms of media can encourage greater levels of interaction with the public and attract more feedback and comments on our service.

We also stress the importance of engaging face-to-face with our key stakeholders, and this will take the form of Member and senior officer briefing sessions, including members of our Customer Services Centre, and other key stakeholder groups such as contract parties, neighbouring authorities, emergency services, etc.

DATA & INFORMATION MANAGEMENT

Knowledge of the asset is used to describe the asset and its performance, and is essential to providing informed decision making and delivering an effective long-term asset



management approach. Accurate and reliable data enables asset managers to understand the asset better and to help drive continuous improvement.

To support more effective use of asset data and information, we have developed an Asset Data & Information Strategy that sets out some key objectives and provides proposed actions for improvements over the next 3 years.

1. Our Asset Data Collection and Inspection regime will be managed to ensure that we capture the relevant data in a timely and accurate manner

This objective means we that we will review and amend the requirements from our various asset groups to maintain relevant, timely and accurate data upon which we will base long-term asset management decisions.

2. Ensuring that our Asset Information Systems are optimising outputs from our data collections processes and that they help inform and support long-term asset management decisions on our highways network

By reviewing both the system technology, usage and implementation practices across our asset groups we will ensure that our information systems support the best decisions. This may take the form of purchase of new system technology, upgrade of existing systems, or changing existing practices to improve outputs.

National recognised and approved condition surveys are carried out on both carriageway and footway. The survey information is necessary to produce our annual national indictors, local indicators, whole government accounting and for the highways network asset valuation, all of which are required by central government. In addition, the survey data is used as an integral part of the highway maintenance process

The UKPMS used for Cheshire West & Chester is contained within our overall asset management information system, *CONFIRM*. This system holds condition data about the carriageways, footways, drainage, structures, street lighting and traffic signals. We currently use the carriageway data from these surveys in a complimentary visualization asset information system, *HORIZONS*, where we can visually represent network condition based on RED, AMBER and GREEN conditions. By analysing the condition data, scheme or treatment reports with variable criteria and budgetary constraints to produce a number of scenarios for a 3 to 5-year maintenance plan. These systems are vital tools in the Lifecycle Planning process for our major asset groups, and more detail of their outputs are found within the individual Lifecycle Plans.

In order that the asset data remains fit-for-purpose, our data collection processes and data management processes are regularly reviewed.



PERFORMANCE MONITORING

As a key element of this strategy, we have developed a performance management framework that defines key performance areas of the highways asset, prescribes targets and measures actual performance against the agreed targets on a regular basis. Monitoring the performance involves regular review and checking that identified improvements are being implemented effectively and ultimately that these improvements are contributing to the achievement of asset management objectives.



Reporting of progress against these performance areas will allows assessments to be made on progress and demonstrate continuous improvement. This performance management framework will form a key element of our asset management framework implementation. Appendix 1 below will contain the completed PMF when approved and made available as an internal Council document.



APPENDIX 1: PERFORMANCE MANAGEMENT FRAMEWORK SUMMARY

To Be Finalised and made available as Internal Council Document