Neath Port Talbot
Castell-nedd Port Talbot
County Borough Council Cyngor Bwrdeistref Sirol

Highways Asset Management Plan

2019-2022

Directorate of Environment and Regeneration

DRAFT

Executive Summary

Neath Port Talbot County Borough Council's Highway Asset Management Plan (HAMP) provides an integrated framework for the delivery of highway maintenance services across the Authority's road network and optimises resources for the management of the highway infrastructure. Neath Port Talbot's road network is predominantly urban and has a total carriageway length of 854km whilst the footway network totals around 950km.

This document sets out the Council's objectives, policies and strategy for managing its highway infrastructure assets. It recognises the importance of its highway infrastructure in supporting corporate, national, regional and local objectives and recognises new legislation, such as the Well-being of Future Generations (Wales) Act 2015 and the Equality Act 2010 (Statutory Duties) (Wales) Regulations 2011. It also recognises the risk based approach, such as laid down in the latest Code of Practice, and considers the resource availability and the prioritisation of such to target areas of greatest benefit and need. National guidance and increasing financial pressures moves the Authority towards this risk based approach, which will help ensure funding is invested where it is most needed and to best effect.

Although the highway network can be given a monetary value it plays a far more important role in the economic and social environments and contributes greatly to the well-being of the county and to Wales as a whole. The network connects villages, towns and communities and underpins the economy. It enables people to follow

their leisure pursuits and commute to and from work. Many of these objectives are encompassed within new Well-being objectives within the Authority's Corporate Plan and in the aspirations set out in the Joint Transport Plan for South West Wales.

The production of the Plan has brought together practitioners responsible for the different asset groups within the Council and follows the principles established nationally in Wales through the County Surveyors Society. The purpose of this Highway Asset Management Plan is to ensure the delivery of highway services in an intelligence led and customer responsive way. This approach will ultimately deliver greater value for money and help achieve key council goals and objectives. Asset management requires a reliable knowledge of asset components and involves developing and maintaining comprehensive inventory and condition data. It also requires an understanding of individual asset group lifecycles and how long components can be expected to last. This knowledge provides the basis for predicting the annual level of investment required to deliver an appropriate level of service in the most cost effective manner.

An Asset Management approach to highway infrastructure maintenance provides a framework for informed decision making. This Plan sets out the management arrangements required to ensure the benefits of investment are optimised and that the highway asset is managed to meet the expectations of the highway user, within the context of the Council meeting its statutory duties as the Highway Authority.

1 Introduction

1.1 Highway Asset Management Planning

Highway Asset Management Planning is the process that is intended to ensure that public infrastructure is managed cost effectively and that available funding is put to best use. To this end, the following definition of Asset Management, which is contained within the Framework for Highway Asset Management, has been accepted by Neath Port Talbot County Borough Council:-

"Asset management is a strategic approach that identifies the optimal allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure to meet the needs of current and future users"

"The adoption of asset management has been proven to provide significant financial benefits" as determined by the review of accounting, management and finance mechanisms for Local Authority Transport Infrastructure Assets. This Asset Management Plan sets out how Neath Port Talbot CBC intends to access the potential benefits founded on the principles of:-

- **Affordable standards:** the Plan establishes standards that can be afforded and communicates them in such a way that the public know what service to expect.

- **Long term planning**: the Plan covers a set time period to ensure the right balance of short term fixes, preventative actions and planned replacement of aged assets.

- **Appropriate Budget allocation:** the Plan identifies data and analysis concerning our assets to inform decisions about how best to allocate finite resources. It also identifies gaps in knowledge and associated actions.

- **Management of risk**: Within the context of long term planning and the setting of standards and budgets, the plan aims to gauge and manage the risk associated with decisions made.

This plan needs to be read in conjunction with the Council's Highway and Winter Maintenance plans.

1.2 Drivers for Change

In July 2005 the Roads Liaison Group published "Well Maintained Highways" the Code of Practice for Highway Maintenance Management. This Code emphasized the need to establish a logical management system in order to deliver value for money in highway maintenance. The Code recognised the need for local flexibility implied by the new focus on the needs of users and the community. It encouraged Authorities to respond enthusiastically and creatively to the challenges posed by Best Value, The Wales Programme for Improvement and sustainability.

The objectives of the Code of Practice were:

- To encourage the adoption of asset management planning as a means of demonstrating value for money in the delivery of highway maintenance, consistent with the wider principles of integrated transport, sustainability and Best Value

- To encourage the development, adoption and regular review of policies on highway maintenance, consistent with the wider principles of integrated transport, sustainability and best value.

- To encourage a focus on the needs of users and the community, and their active involvement in the development and review of policies, priorities and programmes.

- To encourage harmonisation of highway maintenance practice and standards where these were consistent with users' expectations, whilst retaining reasonable diversity consistent with local choice.

- To encourage the adoption of an efficient and consistent approach in the collection, processing and recording of highway inventory, condition and status information for the purpose of both local and national needs assessment, management and performance monitoring.

- To encourage the adoption and regular review of a risk management regime in the determination of local technical and operational standards, the rectification of defects arising from

safety inspections, and investment priorities.

- To encourage continuing innovation in the procurement of highway maintenance services, whilst complying with high standards of corporate governance.

A revised Code of Practice for Highways "Well Managed Highway Infrastructure" was published in October 2016. The revised code requires authorities to apply a "risk-based approach" to the management of all highway assets. The County Surveyors Society Wales (CSSW) is co-ordinating the development of a nationally consistent response to the code across all Welsh local authorities. Using CSSW's national Highway Asset Management Project, guidance is being developed to enable authorities to apply a consistent method of risk assessment.

Neath Port Talbot has established a Highway Maintenance Plan which describes how NPTCBC aims to:

- Maintain safe passage for highway users.

- Protect the asset value of the highway.

- Ensure consistent standards of maintenance across the County Borough relative to road usage.

- Ensure expeditious movement of traffic by complying with the Traffic Management Act.

- Establish a “Needs Based” programme for the maintenance of the network.

- Target resources and maximise the benefit from available funds.

- Facilitate technical and financial monitoring in order to establish trends in highway condition and to assess achievement against expenditure.

- Provide a framework for reviewing policies and standards and for developing strategies.

- Implement the principles outlined in the latest Code of Practice.

- Ensure that all highway maintenance is undertaken with due regard for environmental considerations.

As well as endorsing the above aims and objectives, implementation of the HAMP will support:

- The current and future requirements of the Whole of Government Accounts (WGA) and specifically the CIPFA Transport Asset Code.

- The desire of the Welsh Government to see authorities use asset management as a framework for the maintenance and

development of highways, and to maximise the cost benefits of investment.

- The pressing need to manage ever increasing budget pressures resulting from the national financial position.

- The introduction of the Prudential Code.

- Arresting the ongoing deterioration in some Highway Assets.

- The targeting of increasingly scarce resources to best effect.

- A positive response to increasing public expectation.

- Links to communities and promotion of economic wellbeing.

- Corporate drives towards the regeneration of coastal and valley communities.

- Continuing requirements to improve safety and reduce risks to highway users.

- The implementation of defendable strategies in the context of the Association of Chief Police Officers Road Death Investigation Manual.

- Compliance with Department for Transport (DfT) booklet "Maintaining a vital Asset"

1.3 Progress to Date

This is the fifth update of the Neath Port Talbot CBC Highway Asset Management Plan first produced in 2006. Some of the significant actions taken in the intervening periods include:-

- Development of an in-house condition survey for the un-classified carriageway network and footpaths which is used to inform works programmes.
- Identification of inventory and condition data for safety barriers from which a maintenance programme was developed and actioned.
- The setting up of an inventory database and replacement system for highway signage.
- A review of the council's street lighting following life cycle analysis culminating in a £21 million investment programme to replace aged stock financed through prudential borrowing as part of the Council's Forward Financial Plan.
- A drainage review which has created a comprehensive database of the culverts, gullies and ditches from which improved maintenance schedules have been produced improving cyclical maintenance.
- In 2015 the Authority published a Flood Risk Management Plan (FRMP). Some actions completed to date in line with the Authority's FRMP include:

- Locate, record and map the entire drainage infrastructure in high risk communities.
- Implementation of a more robust and focused maintenance programme for critical highway culverts.

- An updated programme of works to strengthen substandard bridge decks, parapets and other structures.
- The completion of the strategic Port Talbot Peripheral Distributor Road (now named Harbour Way) providing an alternative diversion route off the M4 and opening up the former docks area for regeneration.

1.4 Council Expectations from the HAMP

The Council expects, through the continued refinement of The Highway Asset Management Plan, to continue development of a more planned and holistic approach to maintaining and improving highway assets for users, in line with its statutory duties, which maximises return on investment.

1.5 Corporate Asset Management within Neath Port Talbot CBC

Neath Port Talbot County Borough Council is committed to continuous improvement. The corporate approach to asset management, particularly in the management and use of the Council's property and highway infrastructure assets, forms part of their commitment to support the objectives of the The Well-being of Future Generations (Wales) Act 2015.

The Corporate strategy helps to:

- Promote a corporate approach to the management of assets in pursuit of corporate aims and objectives.

- Secure continuous service improvement and build an understanding of the importance of assets in supporting service delivery.

- Manage property and infrastructure holdings and develop information covering their sufficiency, suitability and cost.

- Manage risk across the Council's range of assets.

- Ensure that capital projects are delivered on time and within budget.

1.6 Goals and Objectives of Highway Asset Planning

The main objectives of this plan are:-

- To identify the extent, condition and value of the Council's highway infrastructure.

- To understand asset and maintenance treatment lifecycles

- To enable the production of informed Works Programmes

In mapping the way forward, gaps in knowledge and good practice have also been identified along with appropriate improvement actions. Alongside the clinical approach of analysing asset condition and lifecycle data, the input of elected ward members is also recognised, with particular regard to local streets in the production of programmes and actions.

It is also noted that environmental (particularly with regard to coal tar contaminated surfaces) and economic factors are driving a critical reappraisal of traditional maintenance treatments. Furthermore, the requirement to “do more with less” whilst ensuring solutions are “fit for purpose” has signalled the need to introduce low cost treatments leaving in place as much as possible of the existing surface material, which is in itself a finite resource. To this end Neath Port Talbot CBC has carried out surface dressing schemes using the latest materials and techniques and is currently assessing preventative treatments along with re-cycling techniques for the purpose of lowering carbon footprint and increasing sustainability in its maintenance practice. Micro-surfacing treatments and jet injection patching are new systems that are frequently in use today.

The Highways Maintenance Efficiency Programme’s (HMEP) booklet ‘Maintaining a Vital Asset’ sets out the UK Government’s expectations of councils in maintaining their networks. If the Council is to meet these expectations, it can only do so through the better use of its resources and the adoption of asset management planning. In addressing the expectations of Government in the areas of footways

and unclassified roads, the Council has demonstrated a cost effective and innovative approach through the efficient use of internal resources, inventory and condition data providing for informed decision-making.

Considerable progress has been made in the implementation of asset management principles since the HAMP was first published. The identification of risks, performance gaps and the subsequent improvement actions are now enabling an improving level of asset management aimed, in the first instance, at arresting further deterioration of the Council's highway asset.

1.7 Time period and updating of this HAMP

This Highway Asset Management Plan covers the period 2019-2022 albeit the actions are based on longer term lifecycle plans. During this period the HAMP will be updated to capture any changes as a result of the ongoing improvements, reviews, budget changes and risk assessments.

1.8 Application of the HAMP

The HAMP aims to bring together all the Authority's goals, objectives and policies utilising both existing and new practices, and sets out how the principles of asset management are being applied to ensure the highway service meets the requirements of the Council and highway users, promoting independence in accordance with the Well-being of Future Generations (Wales) Act 2015.

Effective planning will ensure that the network functions efficiently by highlighting the maintenance needs of the various highway components whilst taking into account the effects of damage caused by increased traffic flows, heavier and larger vehicles, climate change, expanded operations by utilities, and increasingly constrained budgets.

The plan is expected to provide an effective management tool for the running of the highway network with inventory and condition surveys of the different main highway assets enabling cost and risk analyses in lifecycle analysis to inform summary actions, service standards and works programmes.

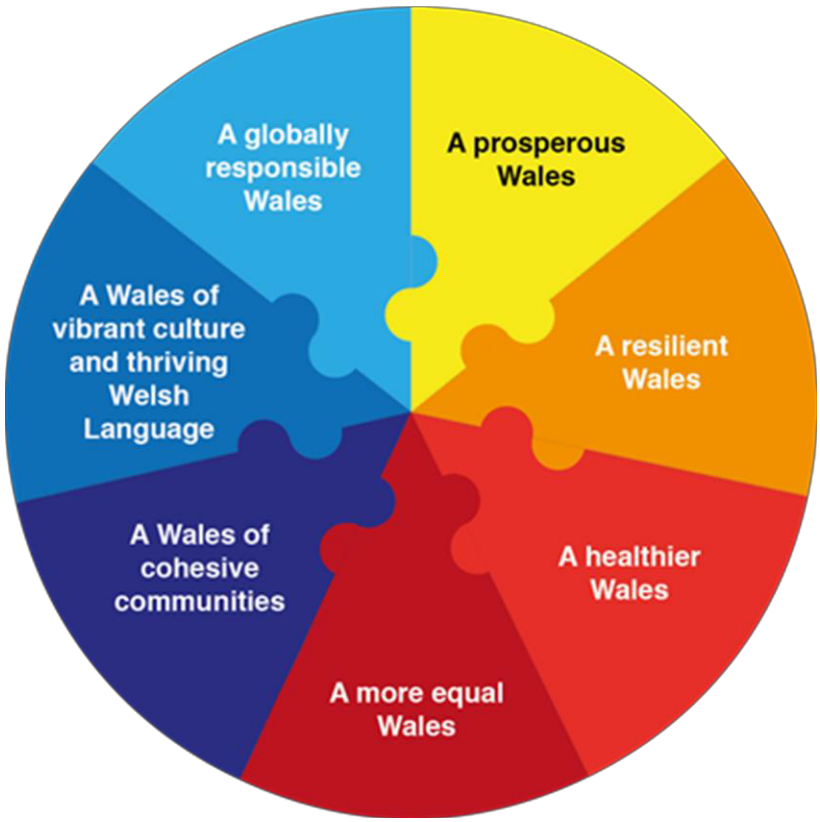
Continued assessment and monitoring over time will provide the basis for measuring performance standards.

1.9 Strategic Document Framework

The Neath Port Talbot Council Corporate Plan 2019-22 is produced to meet the requirements of the Well-being of Future Generations (Wales) Act 2015 (WBFG) and the Local Government (Wales) Measure 2009 by setting out well-being objectives, improvement priorities, the steps we will take to achieve them and how we will measure progress.

Well-being objectives and improvement priorities show how the Council contributes to the social, economic, cultural and

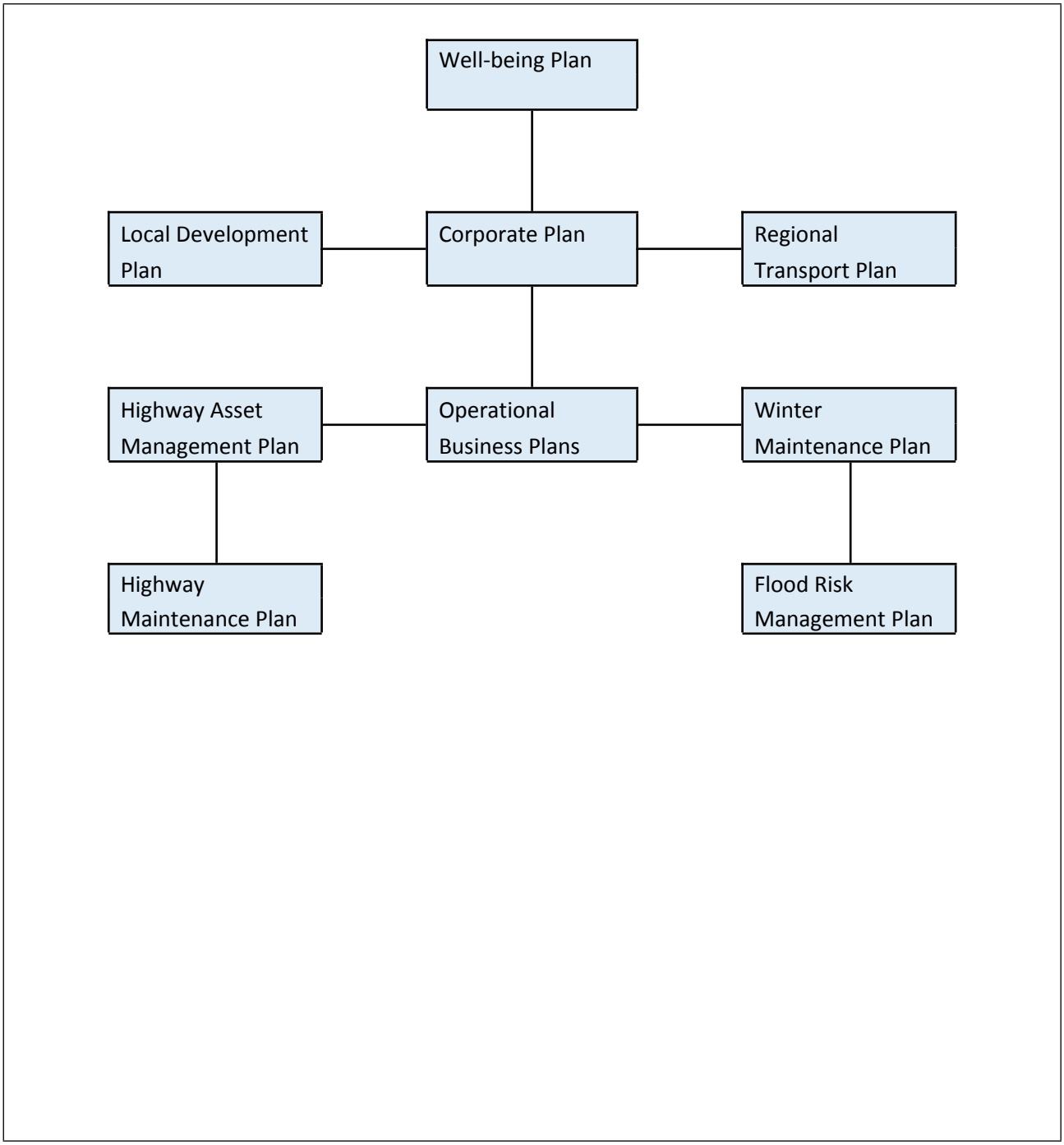
environmental well-being of Neath Port Talbot and to the following seven national well-being goals contained within the Well-being of Future Generations Act:



This contribution is made through the way in which we work in accordance with the sustainable development principle contained within the Act.

The strategic document framework below details the relationship between the various strategic documents within the Council, and where the Highway Asset Management Plan fits in.

Diagram 1.9.1 Strategic Document Framework



2 Asset Description

2.1 The Highway Asset

Neath Port Talbot CBC has detailed geographically referenced data sets for the eight main asset groups which are shown in Table 2.1.1 below:-

Table 2.1.1 Neath Port Talbot CBC – Main Highway Assets

Asset Description	Elements
Carriageways	Including lay-bys, bus lanes etc.
Footways	Including footways adjacent to carriageways
Structures	Including Bridges, culverts and retaining walls etc.
Lighting	Including Lighting columns, illuminated signs/bollards etc.
Traffic Signals	Including signalised junctions and controlled crossings
Signage	Including warning and regulatory signs.
Drainage	Including road drainage manholes, gullies, culverts (including inlets, intakes, outlets and outfalls), and roadside ditches etc.
Road Restraint Systems (Crash Barriers)	

Since the original HAMP was produced in 2006 the Asset inventory has developed to such an extent that we now also have detailed information on the following additional assets groups shown in Table 2.1.2 below:-

Table 2.1.2 Neath Port Talbot CBC – Additional Highway Assets	
Asset Description	**Elements**
Cycle Routes	All cycle routes
Street Furniture	Including street name plates, bus shelters, bins, grit bins, pedestrian barriers, cattle grids, highway trees, seating etc.
Road Markings	Road markings (limited)
Weather Stations	All weather stations
Traffic Calming measures	Including plateaus, speed cushions etc.
Bus Shelters	
Dog Bins	
Post and Rail Fencing	
Car Parks	
Residents Parking Bays	
Salt Bins	
Speed Cameras & Speed Advisory Signs	
Telephone Kiosks	
Tactile Paving	
Pedestrian Crossings	

An inventory overview of the main Highway Asset Groups is shown in Table 2.1.3 overleaf:-

Table 2.1.3 Neath Port Talbot CBC – Main Highway Asset Inventory		
Asset Description	**Amount**	**Unit**
Carriageway	854.31	Kilometres
Footways	988.39	Kilometres
Structures: Bridges Culverts > 1 metre Diameter Retaining walls (in NPT ownership) Retaining walls (ownership unknown)	 356 80 649 1,175	 Number Number Number Number
Street Lighting	19,386	Number
Traffic Signals (light heads on junction control and pedestrian crossings)	372 (sets of traffic signals 67)	Number
Signage: Illuminated Non illuminated	 2945 10,443	 Number Number
Drainage: Critical and High Priority Culvert (under review) Road culverts Gullies Highway surface water drains known (survey ongoing)	 90 1011 31526 87.6	 Number Number Kilometres
Safety Barriers /Vehicle Safety Fences	39.87 368	Kilometres Sections
Post and Rail pedestrian barrier	31.3 498	Kilometres Sections

2.2 Assets Not Covered by this Plan

Assets not covered by this plan include the following:-

- Motorways and Trunk Roads.
- Footpaths and car parks identified by Estates as being in Authority ownership but not maintained by the Highway Authority.
- Garage compounds owned by others.
- Public Rights of Way.
- Un-adopted / private roads.
- Lighting to car parks and parks not maintained by the Highway Authority.
- All other assets within the highway that fall under the responsibility of other organisation such as utility companies.

2.3 Asset Growth

The carriageway asset in Neath Port Talbot has, over the three years since the last HAMP, grown by 5.41 kilometres, representing a 0.63% network growth.

This increase has been due to new residential housing developments in the local area resulting in the adoption of new roads by the Authority.

This growth has resulted in an increase in other assets such as footpaths, drainage systems, street lighting and carriageway markings highlighting the need to periodically update the relevant asset information.

It is expected that, despite the economic downturn, this growth pattern will continue over the length of the Plan due to a number of housing developments, including the Llandarcy Village development and the development around the Port Talbot Peripheral Distributor Road (Harbour Way).

In addition, increased use of expensive high specification materials such as anti-skid and coloured surfacing (normally implemented as part of accident reduction measures) together with block paviours and decorative stone flags in town centres (as part of regeneration schemes) increases the overall cost of asset maintenance.

3 Community Requirements

3.1 Public engagement and reporting

The Corporate Communications and Community Relations Strategy (2018-2020) was developed to help us meet the requirement under the Well-being of Future Generations (Wales) Act 2015, to involve people in the work that the Council carries out. It has also been designed to make our collective communications and community relations efforts more consistent, effective and relevant and to support the delivery of our Corporate Plan.

A new area on the Council's website 'ShapingNPT' has been designed to improve communications and engagement. The aim is to improve awareness of what the Council does and encourage engagement by simplifying the narrative around the Council's Corporate Plan and Annual Reports. We are using citizens' and wider stakeholders' stories to bring the Council's work to life celebrating successes and highlighting areas where more work needs to be done to achieve our objectives.

With particular regard to the highway infrastructure, the main sources of identifying local needs is through correspondence and via the Council's call centre and Customer Response Management system, which handles queries and complaints from the public. Requests for service from the general public are carefully monitored and the detailed reports, along with accident claims, provide a valuable

source of information. This information can be fed into the budget and works programming processes.

This Authority has also established a process of dialogue with elected Ward Members prior to finalising the Planned Works Programmes. This process affords Members an opportunity to table concerns/requests in response to the needs of their ward constituents, which can be considered in conjunction with the works identified from the condition surveys and other means.

3.2 Results of Consultation and Use of Results

Information in the previous section can help identify specific problem areas relating to the highway / drainage infrastructure and assist in identifying:-

- Potential projects for inclusion in future works programmes

- Maintenance hot spots

However, whilst feedback is useful it is not intended that the Highways Asset Management Plan will be particularly driven by public consultation alone as many of the issues addressed by the HAMP are technical in nature and need to be considered in the context of longer term analysis and projections.

It is anticipated that in future years there will be continued consultation with specific stakeholders, such as statutory undertakers, to obtain the benefit of their input, to co-ordinate

investment, and ensure a shared understanding of asset management as it affects their particular areas of interest. This will help ensure that stakeholder input is appropriately considered in the establishment of policy and practice adopted by the Authority. Input from stakeholders is also a valuable source of information concerning some aspects of the network and associated maintenance strategies. Their data will, along with technical surveys and other related information, contribute to ensuring appropriate asset management decisions are made.

4 Future Demands

4.1 Introduction

This section outlines the demands that we anticipate will be placed on the highway asset over the duration of this Plan. These demands together with the associated risks have been considered when formulating the plan.

4.2 Traffic Growth and Composition

Transport for Wales is developing transport models (computerised representations of the transport network) to cover the whole of Wales. These models will represent all the main forms of transport, such as car, bus and rail and will contain information on the trips that people make by each form of transport.

The transport model covering South East Wales was developed by the Welsh Government between 2015 and 2017 and is currently in use. It is anticipated that the transport models covering the rest of Wales will be completed by the end of 2020.

These transport models will:

- Give a better understanding of how the entire transport network works
- Allow assessment of the likely transport impact of different development scenarios, such as where new houses are built

- Provide a simple means of testing a variety of new transport solutions so that new schemes can be proposed that make a positive difference to people's lives

Past increases in car ownership and the general reliance on the private car has put pressure on roads and existing junctions through increased demand for road space. A number of key roads and junctions are at capacity and congested which is constraining growth in some areas and affecting the daily life of residents. The statistics below, from the Department for Transport, indicate the changes in volume of traffic over the past 10 years or so.

The volume of traffic by "Class of Road" in Neath Port Talbot (table 4.2.3 overleaf) reflects a reduction in traffic from 2007 to 2010 (from 1.12 billion kilometres in 2007 to 1.03 billion in 2010) but an increase in traffic from 2010 to 2017, back to a similar figures of that of 2007. The reason for the fluctuation in traffic is unknown and could be a result of a number of factors, such as cost of fuel, financial down-turn, or residents choosing more active forms of travel.

Table 4.2.1 Volume of Traffic 2007-2017

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
_Billion Vehicle Km. in Neath Port Talbot	1.38	1.34	1.32	1.27	1.30	1.29	1.30	1.33	1.38	1.37	1.38

Table 4.2.3 Volume of Traffic by Class of Road 2007-2017

	Motorway	A Trunk - Urban	A Trunk - Rural	A County - Urban	A County - Rural	All Major Roads
2007 - billion vehicle kilometres	0.55	0.02	0.20	0.11	0.24	1.12
2008 - billion vehicle kilometres	0.53	0.02	0.20	0.11	0.23	1.09
2009 - billion vehicle kilometres	0.51	0.02	0.20	0.11	0.23	1.07
2010 - billion vehicle kilometres	0.48	0.02	0.19	0.11	0.22	1.03
2011 - billion vehicle kilometres	0.51	0.02	0.19	0.11	0.23	1.06
2013 - billion vehicle kilometres	0.52	0.02	0.20	0.11	0.22	1.06
2015 - billion vehicle kilometres	0.54	0.02	0.21	0.15	0.23	1.14
2016 - billion vehicle kilometres	0.52	0.02	0.21	0.15	0.23	1.12
2017 - billion vehicle kilometres	0.53	0.03	0.21	0.14	0.24	1.14

Whilst the overall level of traffic in NPT has been relatively static over the past several years, demand for road space in some localised areas is high and/or increasing. As a result, due to the level of traffic, local topography and the existing road system within urban areas, a number of congestion hot spots exist across the County Borough.

Within the Neath area:

- Pen-y-Wern Junction (Bryncoch, Neath):

  Experiences congestion at peak times and any further development would have an impact on the junction and could require road improvements between the junction and the Neath River viaduct. As a result, Neath Port Talbot have secured Welsh Government funding to construct a scheme designed to improve a 120m length of highway between two roundabouts creating two left turn lanes and increasing the queuing capacity of both of the roundabouts.

- Cwrt Herbert / Roman Way**:**

  Experiences congestion at peak times, one factor being the proximity to Dwr y Felin School and the Neath Port Talbot College campus. Land adjacent to Roman Way offers an opportunity to provide bulky goods shopping or housing in a central sustainable location, but such development could also increase traffic generation.

- Neath Abbey / Tesco**:**

  Experiences congestion at peak times causing tailbacks onto the A465 trunk road/dual carriageway.

- Neath Town Centre (Stockham's Corner / Cimla Hill / B&Q / Gnoll / Victoria Gardens):

Faces congestion, air pollution (Victoria Gardens) and in worst cases 'gridlock' at peak times. While development and regeneration proposals aim to revitalise the town centre, congestion could constrain demand.

- Melincryddan:
  Experiences some congestion at peak times in the area between the Briton Ferry Road / Exchange Road (Lidl's) junction and Furnace Terrace, there is queuing in a north-easterly direction

Within the Port Talbot area:

- M4 Junctions 41 / 40 (Port Talbot):
  These junctions currently provide access points to Port Talbot, Cwmafan and the Afan Valley. With the completion of the PDR (Peripheral Distributor Road) the Welsh Government has experimented with slip road closures, or partial closures (at Junctions 40 and 41), to discourage the use of the M4 for local traffic. The results of the experiments are being considered and whilst junction restrictions may ease congestion problems on the M4, the changes could make access to some areas more difficult.

- Heilbronn Way:
  Experiences congestion at peak times.

- Water Street:
  Experiences congestion at peak times.

- A48 Junction at Old Road, Baglan:
  Experiences congestion at peak times

- A48 Junction at Sunny Mount and Pentwyn Baglan Road:
  Experiences congestion at peak times

Within the Pontardawe area:

- Tesco / Pontardawe Inn:
  Experiences congestion at peak times.

- The Cross:
  Experiences congestion at peak times. There is little potential to improve road capacity to address traffic congestion in Pontardawe, the emphasis will need to be on managing access to the town.

Recently Completed Developments:

The following schemes have recently been completed or are a priority for future years:-

- The Peripheral Distributor Road (PDR) Phase 2, also know as 'Harbour Way' was completed in October 2013. The new road

eases congestion between J38 and J41 of the M4 by feeding traffic through the former docks regeneration area.

- Through the Regional Transport Plan, access to Kenfig Industrial Estate has been improved through the modification of an existing railway bridge with low headroom, allowing an alternative access for high sided vehicles. The bridge improvement scheme was completed in November 2012. The only previous access for high sided vehicles was through the narrow, suburban roads of North Cornelly, providing limited potential for development on the industrial estate as these have consequent Planning constraints on the number of high sided vehicles that could need access. These improvements allow these Planning constraints to be removed and allow further development and business investment on the estate.

- The new Baglan Energy Park link bridge was completed in April 2015 and forms an integral connection in a network route between Port Talbot and Swansea. It also facilitates significant improvements on the Port Talbot to Swansea Priority Bus Corridor. The aim of the project was to reduce journey times, particularly for buses, on the A4286, Afan Way, and the A48, through Baglan and Briton Ferry, whilst providing improved access into Baglan Energy Park, permitting continued growth in employment and investment. Baglan Energy Park is a significant employment development area identified in the Local Development Plan (2011-2026).

Proposed Developments:

- Cymmer Viaduct, a Grade II listed structure, has failed its structural assessment and is in urgent need of replacement or bypass. The structure is on a bus route and is currently the only viable means of accessing the upper Afan Valley. In 1999, as an interim measure an 18 tonne weight limit and a single lane working, controlled by traffic lights, were introduced. The long-term plan is to close the viaduct to vehicular traffic, refurbish it so as to open it to pedestrian and then upgrade the existing lower route to make it suitable to larger vehicles. The feasibility and outline design has been completed and detailed design is currently taking place with construction programmed for 2020/21.

4.3 Utility Activity

Activity by Statutory Undertakers and other Utilities can have a major effect on the maintenance and management of the road assets which can generally be detrimental to the life cycle of the asset.

All statutory undertakers are responsible for carrying out their own reinstatements although they must be to Department of Transport standards (see *New Roads and Streetworks Act 1991 – Specification for Reinstatement of Openings in the highway)*.

At present NPT, in line with Department of Transport standards, enforces a 2 year maintenance period on all reinstatements and 3 years on any excavation greater than 1.5 metres.

Neath Port Talbot CBC as part of its statutory duties inspects a random sample of 30% of Utility Works during the following three stages:-

- The process of excavation.

- Within 6 months following interim or permanent reinstatement of the works.

- Within the three months prior to the end of the maintenance period.

Any remedial works required during the maintenance period are completed by the utility company, reducing any potential future deterioration of the highway asset and unnecessary costs to the Authority.

NPT is committed to improving standards of utility reinstatements and has introduced a Random Sample Coring Program (via an outside contractor) to check Utility and internal contractors works in the highway which have accumulated over 500 coring extractions over this period. The results of the checks undertaken from the Specification for Reinstatement of Openings in the highway has resulted in a 80% failure of completed reinstatements which need to be improved to avoid further deterioration of the highway asset. With this in mind the Authority has arranged for underperforming Utilities/contractors to attend “Improvement Meetings" during which

representatives are able to explain the measures to be put in place to improve reinstatements thus ensuring the life and structural stability of the highway asset in the future. NPT will continue to undertake appropriate enforcement action for non-compliance and where necessary to offer support to encourage continuous improvement in compliance levels.

NPT also attend Highway Authority and Utilities meetings on a quarterly basis to discuss planned works with the intention of co-ordinating the Authority works with all statutory undertakers' works and neighbouring authorities' works in an effort to improve forward planning and help extend asset life cycles.

Co-ordination and monitoring is important, not only to minimise delays to the travelling public, but also because the Council is often criticised for delays caused by traffic management implemented by utilities for reinstatements works and repairs.

4.4 Climate Change

It is very difficult to forecast changes in climate but there has been an acceptance that general weather patterns are changing. The noticeable changes in the past few decades have seen a number of severe winters and increased rainfall. Some winters have been prolonged with long periods with sub-zero temperatures and heavy snowfalls. As a consequence of the recent severe winters the Authority made the decision to provide a new salt barn providing additional capacity thereby increasing the resilience of the salt stocks

in an effort to ensure the Strategic Network remains accessible during severe weather conditions.

Increased rainfall has resulted in short heavy downfalls producing localised flooding whilst prolonged periods of lighter longer lasting rainfall have resulted in land becoming saturated and flooding as a result of excessive surface water run-off. Furthermore it is envisaged that with the increasing severity of weather conditions flooding will become more prevalent, testing the existing highway drainage infrastructure and providing increased infrastructure budget pressures.

4.5 Changes in Legislation

New and changes in legislation often means the Council having to react and adapt, which often means an increase in the cost of maintaining the asset. In 2009 and 2010 the Flood Risk Regulations and the Flood and Water Management Act came into force in the UK. In response, the Council has since produced a Flood Risk Management Strategy and Flood Risk Management Plan, which have ultimately, amongst other outcomes, identified the critical drainage infrastructure that will, when operating effectively, reduce the risk of flooding.

New National Standards for Sustainable Drainage Systems became statutory on 7th January 2019, implementing Schedule 3 of the Flood and Water Management Act in Wales. The new standards will see a significant shift from traditional drainage systems, to sustainable

drainage which will bring new challenging maintenance demands for the Authority.

The Well-being of Future Generations (Wales) Act 2015 came into force on 1st April 2016 and has had an impact on decisions going forward, in relation to the maintenance and management of road assets and on the way in which services are delivered.

Ageing Infrastructure

As a result of the actions undertaken in line with the Flood Risk Management Plan (FRMP), the Authority has recently identified a number of highway culvert crossings conveying historical natural watercourses which require significant remedial work. It is envisaged that over the coming years as and when the actions set out in the FRMP are undertaken, many more highway culverts requiring short term significant remedial works will be identified.

4.6 Local / Regional Transport Strategy / Demands for Additional Assets

The following key transport issues have formed the basis for the development of the Regional Transport Plan:-

- Active travel is being promoted in NPT. Active travel simply means making journeys by physically active means like walking and cycling and NPT aim to achieve a significant shift to walking and cycling as the most sustainable forms of transport.

Walking is key to getting more people choosing to not use cars as it is ideal for shorter trips. Walking also forms part of public transport journeys i.e. walking to and from buses, trams and trains. Positive impacts include reduced congestion, reduced air pollution, higher quality public realm and better physical, mental and social health.

Investing in infrastructure and support for walking and cycling can increase economic growth and vibrancy. Those walking and cycling tend to spend more money locally than drivers. Increasing walking and cycling can stimulate economic growth in urban areas and benefit local shops.

As a result, good infrastructure for walking and cycling is important, but people also need encouragement, support and guidance to change their behaviours and switch their journeys to on foot or by bike.

- Road traffic volumes in the region and pressures in terms of unreliable journey times, localised congestion, reduced air quality, increased noise, vibration and carbon emission issues.

- Road safety issues and associated public concerns: Whilst there has been a general reduction in serious injuries and deaths from road traffic collisions, there are wide variations across the region and for particular road users' categories.

- Disparities in car ownership and use: Whilst overall both have increased, growth has not been consistent across the region. Those with cars are able to participate in a far wider range of

opportunities than those reliant on public transport, walking or cycling for mobility.

- Variations in Public Transport provision: These broadly match population distribution, with higher frequency services and better coverage to the south and east of the region, where the majority of the population live, with less extensive provision in the more sparsely populated rural areas. Rail, bus and coach services are provided by private sector companies through mainly commercial services along with services supported with Welsh Government funding.

- Access constraints: Physical access to bus and rail services remains a barrier to mobility impaired in some locations.

Other key issues that have influenced the Regional Transport Plan include:-

- Freight operation is an essential contributor to the economy but is planned and delivered by the private sector within European and UK legislative processes.

- Ports and Shipping facilitate the movement of passengers and freight to and from the region and are a critical link in the national supply chain network.

The Regional Transport Plan (RTP) links with the National Transport Plan for Wales and overall the Vision for South West Wales is to:

"*Improve transport and access within and beyond the region to facilitate economic development and the development and use of more sustainable and healthier modes of transport."*

From this vision stems the following strategic objectives:-

- To improve access for all to a wide range of services and facilities including employment and business, education and training, health care, tourism and leisure activities.

- To improve the sustainability of transport by improving the range and quality of, and awareness about, transport options, including those which improve health and well being.

- To improve the efficiency and reliability of the movement of people and freight within and beyond South West Wales to support the regional economy.

- To improve integration between policies, service provision and modes of transport in South West Wales

- To implement measures which make a positive contribution to improving air quality and reducing the adverse impact of transport on health and climate change, including reducing carbon emissions.

- To implement measures that help to reduce the negative impact of transport across the region on the natural and built environment, including biodiversity.

- To improve road safety and personal security in South West Wales.

The long term strategy in the Regional Transport Plan developed in conjunction with stakeholders identifies:-

- Improving land use and transportation planning – through the use of Accessibility Planning, to ensure that development is properly located.

- Improving strategic east/west road and rail links – to create more reliable internal connectivity and improved connectivity with rest of Wales, the UK and European neighbours.

- Improving Strategic Bus Corridors – to create more reliable and attractive connectivity between key settlements.

- Promoting integration – to encourage more sustainable travel choices and reduce the barriers to interchange.

- Improving safety in transport – to reduce personal injuries and fears for personal safety.

- Providing more and better information - to raise awareness on the range and use of sustainable transport options.

- Improving linkages between key settlements and strategic employment sites – to create a range of attractive passenger transport and walking and cycling opportunities linking key settlements with their hinterlands and with strategic employment sites.

- Improving the efficiency of the highway network – through a range of appropriate mechanisms including demand restraint.

Furthermore a range of policies are identified under the following broad headings:-

- Reducing Greenhouse gas emissions and other environmental impacts from transport.

- Integrating local transport.

- Improving access between key settlements and sites.

- Enhancing International Connectivity; and Increasing Safety and Security.

Developments included in the previous Plan and now complete are:

- Port Talbot to Swansea Bus Corridor. New Clear Channel bus shelters installed – shelters maintained by Clear Channel
- Neath (Llandarcy) to Swansea Bus Corridor. New Clear Channel bus shelters installed – shelters maintained by Clear Channel
- Port Talbot Parkway Station development. Port Talbot railway station renewal complete – Station building owned by Network Rail
- Swansea Valley to City Centre Bus Corridor. New Clear Channel bus shelters installed (part route) – new shelters maintained by Clear Channel
- Bus priority corridor between Port Talbot Parkway and Bay Campus New Clear Channel bus shelters installed – shelters maintained by Clear Channel
- Port Talbot to Neath Bus Corridor. New Clear Channel bus shelters installed – shelters maintained by Clear Channel
- Port Talbot Modal Interchange Port Talbot Hub Complete – land exchange still to be complete
- Bus priority corridor between Port Talbot Parkway and Bay Campus
- Port Talbot to Neath Bus Corridor.

Within the current plan, proposed developments relevant to the Neath Port Talbot area are:-

- Neath Railway Station Improvements - NPT have bid to WG for feasibility/design funding to create an integrated transport Hub at Neath Station bringing together both rail and bus travel.
- Coed Darcy southern link. St Modwen are in the process of submitting an Approval in Principal AIP for a new structure as part of their housing development.
- Cymmer Bridge and associated works - feasibility and outline design has been completed and detailed design is currently underway with construction programmed for 2020/21.
- Baldwins Bridge – joint scheme with City & County of Swansea who are managing the project - Design complete.
- Park and Share sites close to M4 junctions.
- Multi Modal Freight Facility - Margam Wharf.

5 Levels of Service

5.1 Establishment of Levels of Service

Levels of Service are "*the defined service quality (service standards) in respect of particular asset components against which performance can be measured for the benefit of users"*

Levels of Service are composite indicators that reflect the social, economic and environmental goals of the community and may relate to safety, availability, accessibility, condition, environmental impact, customer service and financial performance (cost). Ideally, levels of service should create visible linkages between user needs, corporate objectives and any works undertaken on the asset.

The connection between customer expectations and what can, in practice, be delivered needs to be understood and communicated to stakeholders. It is also important that everyone involved in the process is aware that decisions, which impact on service delivery, need to align with the overall policies and objectives of the Council.

Defined levels of service are the realistic aspirations that a Highway Authority strives to meet reflecting statutory obligations, corporate goals and customer expectations in delivering highway services. Levels of service need to consider the preservation and physical integrity of the asset, and also meet the demands of safety, availability and accessibility.

Key requirements affecting the development of levels of service are:

- **Legislative requirements**: It is a requirement that levels of service comply with the legal obligations and statutory duties incumbent on a Highway Authority. Additionally, the adoption of recognised codes of practice will provide the necessary guidance to align service delivery with national best practice.

- **Policy and objectives**: NPT sets out its policies and corporate objectives in documents such as the Local Transport Plan and Highway Maintenance Plan. Levels of service are not only determined by local objectives as there need also be an acknowledgment of the wider national targets set out by the Government. As a consequence, the budget and asset planning process is designed to enable strategic choices and decisions to be made in an informed manner, so that the council can manage its budgets and services with due regard for prudence, stability, investment and efficiency.

- **Customer expectations**: The expectations of all road users, the community and local businesses need to be recognised as a factor in the service level decision making process. The provision of better information will enable consultation with customers on a more informed level.

- **Best practice guidelines**: A number of best practice guidelines exist that directly influence levels of service. While these best practice guidelines are not always statutory requirements, they

represent a description of accepted good practice. This can be particularly important in ensuring that assets are protected against public liability claims. The most significant best practice guidance documents relevant to this Plan are the Code of Practice for 'Well-managed highway infrastructure'.

- **Affordability**: Service options set out to consider the most economically efficient way of delivering an acceptable level of service over the long term. Pressures on council funding and increasing demands on the highway network mean it is not always possible to secure the required funding to deliver the desired solution, and budgets influence what can realistically be achieved. Affordability must therefore be recognised and acknowledged when setting deliverable levels of service

- **Availability of resources**: The availability of suitably skilled resources throughout the construction industry is limited and targets can sometimes be difficult to achieve.

5.2 Measurement and Reporting of Levels of Service

An Asset Management approach provides existing and projected data to support the decision making process. In practical terms this provides the necessary information to make informed choices regarding the identification and assessment of service needs.

Once the requirements driving an asset group's service level have been determined it is necessary to develop service options around

these requirements, and evaluate them. This process should clearly identify the service options applicable to the particular asset group.

As noted previously, service delivery can be influenced by a number of demands such as legislation, best practice guidelines, Health and Safety requirements, corporate goals, political influences, customer expectations and financial constraints. The aim is to improve service provision through developing or altering current practices, as part of developing NPT's HAMP, by a process of continued monitoring and review.

In setting its own standards for asset groups NPT has considered the following set of generic service levels:

- **Statutory Minimum:** Meeting statutory or legislative requirements and notes for guidance only.

- **Existing:** The impact on the asset if current funding levels are maintained.

- **Steady State:** To arrest deterioration of the asset and maintain current condition, performance and value.

- **Prescribed Service:** An enhanced standard based on customer expectations and/or political aspirations.

- **Optimum Service:** An optimum level of service based on long term economic lifecycle planning.

- **Attainable Service:** A reinterpretation of the Optimum Service in light of available resources representing the best long term return for available shorter term funding.

Ultimately, the chosen option must be a result of a combination of cost, benefit and risk. Depending on the asset category, the options evaluation criteria include:

- Programmes and planning
- Safety implications and requirements
- Availability of service or asset
- Accessibility to service or asset
- Condition of the asset
- Environmental impact of providing and maintaining the asset
- Customer service, expectations and perceptions
- Risk and benefits
- Finance
- Performance targets

In respect of adopted and specified service standards the asset management process will monitor, review and report on progress and performance. As such, levels of service, where possible will need to be measurable and realistic having performance targets that can be set out and measured using appropriate indicators, including:

- Single Data List (superseded the National Indicator Set measures (NIS's) in 2011)

- Local Performance Indicators (LPI's)
- Recording of Response Times
- Customer Complaints Monitoring Procedures
- Condition Surveys
-

To inform the monitoring process, the tables on the following pages give examples of asset inspection regimes, maintenance criteria, and response standards, and these along with other information is detailed within the Council's Highway Maintenance Plan:-

Table 5.2.1 Network inspection regime – Inspection frequency

Classification		Safety Inspection	Technical Surveys
Carriageways			
A Road	Strategic Route, Main Distributor, Secondary Distributor	Safety inspection regime in place	Annual SCRIM (both directions) SCANNER (one direction)
B Road			
C Road	Link Roads / Local Access roads		Annual (25%) SCRIM/SCANNER
Unclassified	Local access roads		Annual visual survey
Footways			
	Prestige and Primary Routes	Safety inspection regime in place	Biennial visual survey
	Secondary walking routes		Biennial visual survey
	Link f'ways & local access footways		Biennial visual survey
	Industrial estates and other footways		Biennial visual survey

Cycleways			
	Adopted as part of C'way / Footway	Safety inspection regime in place for cycleways adopted as part of the carriageway / footway.	Visual survey
	Remote from C'way / Footway		Not undertaken
	Cycle trails		Not Undertaken
Safety Barriers			
	Safety Barrier	Safety inspection regime in place	Condition survey carried out every 3 years. Principal condition survey every 6 years.

Table 5.2.2 Criteria for consideration of Maintenance

Planned Maintenance – Carriageways		
Survey Criteria	**Further Investigation Options**	**Action options (*)**
SCRIM: Area below Investigatory Level based on DMRB HD28/04)	visual site assessment / pendulum / sand patch test / GripTest	resurface / monitor / survey following year / erect warning signs
Deflectograph: Area of low residual life (less than 15 years)	visual site assessment / core / trial pit	resurface / reconstruct / monitor
SCANNER: Analysis of individual parameters in accordance with PMS guidelines	visual site assessment core / trial pit	resurface / prevention treatment
Visual Inspection: Analysis of 1-5 ratings to create scheme assessment lengths	visual site assessment	resurface / prevention treatment

Planned Maintenance - Footways		
Category	**Defects**	**Treatment**
Main Shopping Areas	Coarse cracking Coarse crazing Depressions > 25mm	Localised Repair or Restore Surface
	Trips > 20mm	Localised Repair or Restore Surface
Busy Urban (flexible)	As for (i) above	Localised Repair or Restore Surface
Busy Urban Areas (Rigid)	Depressions > 25mm Trips > 20mm	Localised Repair or Restore Surface
	Cracks/gaps > 20mm Rocking Flags	Localised Repair or Restore Surface
Other Urban Areas / Rural Footways	As for (ii) or (iii) above	Localised Repair or Restore Surface

Note: Prioritisation is subsequently undertaken on the basis of greatest risk.

Planned Maintenance - Kerbing		
Category	**Defect**	**Treatment**
All Footways	Severe deterioration	Localised repair or restore upstand
Busy Urban Areas	Up-stand / kerb height 75mm or less	Localised repair or restore upstand
Other Urban Areas / Rural Footways	Kerb deterioration	Localised repair or restore upstand
	Up- stand / kerb height 30mm or less	Localised repair or restore upstand
	Kerb deterioration	Localised repair or restore upstand

Note: Prioritisation is subsequently undertaken on the basis of greatest risk.

Table 5.2.3 Inspection Regime for Highways

Reactive Response Standards	
Defect	**Response Time**
Road pothole or footway trip hazard > 20mm	1 – 35 Days(*) (normally 2hr, 24hr, or 35 days)
Surface depressions which exceed the New Roads and Street Works Act (NRSWA) intervention requirements.	As above (*)
'Knocked Out' Kerb	As above (*)
Hazardous debris or obstruction in the carriageway, missing covers	2 Hours
Flooding or surcharging highway drainage system	2 Hours

(*) Response time prescribed, at Inspectors discretion based on risk

Table 5.2.4 Inspection Regime for Structures

Bridges, Culverts, Retaining walls and Cattle Grids	
Inspection Category	**Frequency**
General	2 Years
Principal	6 Years
Special	As Required (*)

(*) Special Inspections can be conducted following a collision or flooding or where an abnormal load is to pass.

Other Highway Structures, Culverts, Retaining walls etc	
Inspection Category	**Frequency**
General	2 Years or receipt of report/complaint

More frequent inspections are identified in the 'Structures Database'.

Table 5.2.5 Cyclic Maintenance Frequencies

Activity	Frequency
Gully Cleansing General	Annually
Culvert Inlet & Outlet Cleansing Critical and High priority	Proactive scheduled maintenance Additional proactive maintenance prior to forecast heavy rainfall.
Grass Cutting and Hedge Trimming Adopted R'bouts & Islands Grassed Verges Highway Flail Cutting Sites Safety Cutting	As per detailed schedule but typically, Minimum 4 cuts per year Minimum 4 cuts per year Minimum 1 cut per year Additional cuts where unusual growth has created a hazard
Verge Maintenance Weed Spraying (footways) Application of Retarders Noxious Weed Removal	Programme of spraying twice per year in Summer Not Used Ragwort – As and when required (pulled up) Japanese Knotweed – Selected areas per year (sprayed)

Activity	Frequency
Siding General	Where vegetation encroaches by 300 mm as identified by Inspectors
Cleansing General	Litter pick –Minimum - 4 times / year - max daily Sweeping –Minimum - 4 times / year -max weekly

Table 5.2.6 Maintenance of 'Aids to Movement'

Activity	Frequency
Traffic Signal Maintenance* Fault Attendance	Urgent fault - 2 hours (repair within 8 hours) Non - urgent – 24 hours (repair within 72 hours)
Sign Cleaning Class I Roads Class II and Class III Unclassified Roads	As required to preserve safety
Road Marking Reinstatement** Class I, Class II and Class III Roads Unclassified	As required to preserve safety
Reflective Stud Replacement All Classes	As required to preserve safety

* Bulk changes may only be undertaken at certain times during the week at specified locations.

** Road markings affected by maintenance works or surface dressing are reinstated within 14 days of the works being completed.

Table 5.2.7 Maintenance of Street Lighting and Illuminated Signs

Repair of Faults	
Category of Fault	**Minimum Attendance and Assessment Time***
Outages	
Illuminated 'Aids to Movement'	5 working days
Lighting unit	5 working days
Section of Lighting	Same day when the fault is on an NPT circuit i.e. not on a WPD circuit
Emergency	
To make safe potential electric danger Associated with public lighting infrastructure.	Within 2 hours

Cleaning and Servicing

Installation	Frequency
Signs and Bollards	Every site visit
Lighting Units	On lamp repair

Fault Detection

Approximately 70% of the Council lighting stock (columns) is controlled by a central Management system (CMS) which allows automatic nightly fault reporting.

5.3 Performance Review

Alongside measurement and reporting of Service level performance and the production of periodic Status and Options reports, actual performance can, as appropriate, be compared from time to time with the predicted or targeted performance at the time of establishing the management and investment strategies for a given asset. In any event a summary performance report will be presented annually to the Council's Capital Programme Steering Group and Environment Management Team, in consideration of which any amendments to levels of service and investment will be considered alongside the business planning process for individual service areas.

5.4 Existing Level of Service

A summary of asset performance against the existing level of service is given in Table 5.4.1 overleaf:-

Table 5.4.1 – Performance against existing Level of Service

Level of Service Sub Category	Existing Level of Service
Carriageways (classified)	
Condition	SCANNeR surveys show the condition of the Classified network within NPTCBC to be better than that of the Welsh national average
Investment	A cut in the level of investment will see deterioration in the highway asset and the value will decline. Reactive maintenance costs will increase as a result.
Safety implications	Deterioration will increase the safety risks to road users, in the absence of increasing reactive maintenance requirements.
Carriageways (unclassified)	
Condition	The in house visual inspections results show a steady improvement in the condition of the Unclassified network year on year between 2010 and 2018. The improvement can be attributed to additional investment under Welsh Government Local Government Borrowing Initiative. Also, the carriageway works programme has had a period of greater priority following previous investment in dealing with sub-standard footways
Investment	Continuing at base budget levels, without additional funding, will see deterioration in the highway asset and in the asset value
Safety implications	Further deterioration, increasing risks to safety of road users in the absence of increasing reactive maintenance budgets.

Footways	
Condition	In-house visual inspections carried out between 2009 and 2017 indicate an overall deterioration in the footway network, despite an investment programme that targeted areas of heavy deterioration. Carriageway programmes have had a period of greater priority over footway works which is now being reviewed
Investment	A rise is anticipated in claim related costs if decline is allowed to continue.
Safety implications	Deterioration will increase risks to safety of road users' in the absence of increasing reactive maintenance budgets, or greater priority to planned works
Structures	
Condition	Bridge Condition Index indicates average condition as 87-89 (good) however, 19 sub-standard bridges currently remain in service and are monitored in accordance with BD79
Investment	Funding limited to historical budget. 65% of the 2,290 structures have maintenance or repair works identified in Structures Work Pool.
Safety implications	Sub standard bridges require monitoring as a requirement of Management of Highway Structures - Code of Practice.
Street Lighting	
Condition	The majority is now "new stock"
Investment	Major £21 million infrastructure renewal project funded from Council resources now complete.
Safety implications	Risk of column and electrical cabling failure has now significantly declined.

Highway Signs	
Condition	'Reasonable', with some signage life expired.
Investment	Essential renewals currently ongoing.
Safety implications	Any missing mandatory signs in particular are a safety concern.
Traffic Signals	
Condition	'Reasonable', with some equipment life expired.
Investment	Essential renewals currently ongoing
Safety implications	Fault repair system operated.
Safety Barriers	
Condition	Repairs and upgrades were carried out following a 2009 inventory/condition survey and the 2013 Principal inspection/survey. Another Principal inspection/survey was completed in 2018 and any concerns identified will be considered and repairs arranged as necessary within available resources.
Investment	Annual Works Programme
Safety implications	Specific locations where the road edge requires engineering works before the barrier can be renewed will need special consideration
Drainage	
Condition	Ongoing surveys have highlighted that the drainage infrastructure is an ageing asset and some locations are in urgent need of repair.
Investment	Both proactive and reactive maintenance undertaken. It is very likely that additional investment will be required as condition surveys progress.
Safety implications	In addition to the obvious safety implications associated with surface water and freezing water on the highway during winter months, there are safety issues surrounding the sudden collapse of

5.5 Target Levels of Service

Initial target levels of service are given below. However these may need to be revised once the Council's latest Forward Financial Plan has been finalised and its full impact evaluated.

Table 5.5.1 – Initial Target Level of Service

Main Asset Groups	Initial Target Level of Service
Carriageways -Classified	Steady State – with aspirations to move to a prescribed service level of no more than 7% of individual road classification requiring maintenance.
Carriageways - Unclassified	Steady State – with aspirations to move to a prescribed service level of no more than 14% requiring maintenance.
Footways	Steady State – with aspirations to move to a requested service level of no more than 15% of the footway network requiring maintenance.
Structures	Steady State - with resolution of "Cymmer Bridge" issues.
Street Lighting	Prescribed Service – On completion of ongoing Improvement Programme.
Highway Signs	Steady State – with aspiration to move to a requested service level where less than 5% of signs are missing or badly damaged.
Traffic Signals	Steady State.
Drainage	Steady State.
Safety Barriers	Steady State.

6 Lifecycle Planning

6.1 Purpose and Importance of Lifecycle Planning

As part of this plan's development, we will create lifecycle plans to consider each of the main asset groups. Each lifecycle plan considers:-

- Inventory (amount of asset)
- Condition and trends
- Maintenance options / Service levels / Risk Management and Minimum requirement
- Establishing maintenance strategies / service standards

Periodic updating of the lifecycle plans enables local knowledge to be captured and considered.

6.2 Output from Lifecycle Planning

The output from the lifecycle planning process provides 20 year financial and other projections linked to target levels of service, to inform the Council's 3 year Highway Maintenance Proposals.

Lifecycle plans are essential to Highway Asset Management Planning to provide the longer term context with which to consider asset management practices, investment, performance and risk management consistently across all asset groups.

6.3 Lifecycle Plan Contents

Lifecycle plans are working documents, updated periodically as information is gathered and analysed on each asset group. When fully populated each Life Cycle Plan will contain the following information:-

Section	Answers	Contains
The Asset	What assets do the Council maintain?	• Inventory details (type size, etc) • Asset growth statistics
Service Expectations	What is each asset group required to do?	• Customer expectations • Council objectives for transport • Specific user requirements • Safety considerations, • 3rd party use • Environmental requirements, • Network availability, • Amenity considerations
Management Practices	How is this asset group managed?	• Policies • Inspection Regime • Condition Assessment • Asset Acquisition standards • Routine Maintenance standards • Operational/Cyclic Maintenance • Planned Maintenance standards • Disposal standards
Investment	How much is being spent and should be spent over the longer term on this asset group?	• Historical Investment • Output from historical investment • Forecast Financial Needs • Valuation: GRC, DRC & ADC

Section	Answers	Contains
Strategies	What strategies are there for the future management of this asset group?	• Relevant Strategy Information SOR, HAMP, FRMP
Service Improvement actions	What improvement would enhance council management of this asset group?	• Asset specific improvement actions
Works Programme	How are works programmed for this asset group?	• Existing forward works programme • Works programme coordination • Option Appraisal: treatment selection - at a project level - at a budget category level? • Public input/consultation via Members Surgeries
Risk	What are the risks associated with this asset group?	• Risk identification • Major asset risks
Works and Service Delivery	How are works delivered or procured on this asset group?	• Approved processes
Performance Measurement	How is the performance of this asset group measured and Managed?	• Performance indicators • Current performance figures • Target performance figures

6.4 Status of Lifecycle Plans

Lifecycle plans are being produced for each of the asset groups and their current status is noted in the table below:-

Asset Group	Status	Comments
Carriageways	Update of the Plan approaching Completion	More work required
Footways	Update of the Plan approaching Completion	More work required
Bridges and other highway structures	Update of Plan approaching completion	More work required
Street Lighting	Update of Plan pending	Major £21 million infrastructure renewal project funded from Council resources now complete. Approximately 14,000 units replaced/upgraded with modern luminaire and Central Control Management system. A lifecycle plan is being produced including the new infrastructure which is aimed at maintaining the level of service the project set out to achieve.

Asset Group	Status	Comments
Drainage	Not started (Major culverts are covered by the Highway structures lifecycle plan).	Asset inventory for culverts complete. Asset inventory for gullies complete but data required for interconnecting drain systems is ongoing. Filling this performance gap is the next step in plan development.
Traffic Signals	Complete	Plan requires updating.
Highway Signs	Ongoing	Plan requires updating
Safety Barriers	Ongoing	Following an initial Safety Barrier condition survey a replacement programme was completed. A further condition survey was carried out in 2018 to assess the asset condition and to formulate an updated Lifecycle Plan.

6.5 Status and Options Report (for Major Asset Groups)

Periodic Status and Options reports are being produced for each of the major asset groups and their current status is noted in the table below:-

Asset Group	Proposed Frequency	Status	Comments
Carriageways	Every 2 years	Final draft completed	Final approval Required.
Footways	Every 5 years	Initial draft completed	Further work Required.
Bridges and other highway structures	Periodic	Final draft completed	Final approval Required.
Street Lighting	Periodic	Completed. Currently on year 7 of 7 year action plan.	Review to be commenced upon completion of 7 year infrastructure renewal project.
Drainage	Every 3 years	Not started	
Traffic Signals	Every 3 years	Not started	
Highway Signs	Periodic	Not started	
Safety Barriers	Every 3 years	Not started	

Status and Options Reports will provide an update on the relationship between existing / future budget options and the predicted condition of the asset over a 20 year cycle. Monitoring this relationship will provide data to make more informed decisions going forward.

7 Financial Summary

7.1 Sources of Funding and Budget Allocation

Investment in the Highway Asset is derived from the following funding streams:-

Revenue: Revenue funding is dependent on Council expenditure priorities in the context of available income which is derived from Welsh Government Revenue Support Grant, non-domestic rates, Council Tax and any other specific Grants. The majority of funding is therefore derived from Welsh Government and the total budget allocated to Road Maintenance is split between a number of service headings based, in large part on historical precedence.

Where additional funds are made available to assist with ongoing maintenance and management of road assets, such as Road Maintenance Grants, individual cases are put forward internally within funding guidelines for consideration following which allocations are made in accordance with Member priorities.

Capital: Capital Investment is generally funded by Welsh Government (WG), who provide a supported borrowing element forming the Authority's base capital budget. WG also include an element within the Revenue Support Grant to cover the debt charge repayments on this borrowing.

The capital base budget allocation is further supplemented by:-

- Unsupported borrowing (prudential borrowing)
- Capital Grants & Contributions
- Capital Receipts
- Direct Revenue Financing

Capital Investment Plans are reviewed by relevant Management Teams and approved by relevant Committees within the Council.

Should there be a requirement to fund additional specific projects from Prudential Borrowing, a full Options Appraisal exercise has to be undertaken for all major projects. The Appraisal normally considers amongst other issues the objectives of the Council, alternative options and the affordability of loan repayments from existing revenue resources.

Grants: The Council submits annual bids for additional funding to the Welsh Government in respect of Transport Grant and Safe Routes to Communities including Road Safety Schemes and regional transport packages. In addition the council does, from time to time, receive additional Grants such as Special Road Maintenance Grant which is distributed to local authorities based on Road Standard Spending Assessment (SSA) and is governed by strict criteria.

Within the Revenue and Capital allocations determined by Council any virement of funds between Service Headings to reflect need are dealt with at Head of Service level within the Environment Directorate

as far as Revenue is concerned, and within the Corporate Capital Programme Steering Group as far as Capital is concerned. Any virement in excess of £100k is dealt with at Corporate Director level.

7.2 Historical Expenditure

Historical investment in roads assets over the last 4 years is as follows:-

Asset	Works	2014/15	2015/16	2016/17	2017/18
Carriageways	Planned	£1,342,000	£1,138,000	£1,006,500	£1,125,500
	Reactive / Routine				
Footways	Planned	£49,264	£112,500	£376,500	£109,500
	Reactive / Routine				
Structures	Planned	£650,000	£319,085	£424,987	£334,190
	Reactive / Routine	£266,623			
Street lighting	Planned	£2,000,000	£2,392,819	£5,474,096	£4,112,188
	Reactive / Routine	£1,448,276			
Signs	Reactive / Routine	£32,911	£32,991	£33,758	£34,445
Drainage	Planned	£253,644	£201,880	£225,439	£301,014
	Reactive / Routine				
Traffic Signals	Planned	£82,372	£19,780	£10,000	£35,000
	Reactive / Routine	£108,197			
Safety Barriers	Planned	£258,000	£41,456	£30,429	£50,000
Winter Maintenance	Reactive / Routine	£588,362	£510,613	£529,174	£668,444

7.3 Predicted Available Short – Term Funding

Asset	Works	2018/19	2019/20	2020/21
Carriageways	Planned	£800,000	£800,000	£800,000
Footways	Planned	£100,000	£100,000	£100,000
Structures	Reactive	£195,000	£195,000	£195,000
	Planned	£300,000	£300,000	£300,000
Street lighting	Reactive	£429,000	£429,000	£429,000
	Planned	£4,100,000	£3,592,000	£900,000
Illuminated Signs	Reactive	£50,000	£50,000	£50,000
	Planned	Nil?	Nil?	Nil?
Signs	Reactive	£33,000	£33,000	£33,000
	Planned	nil	nil	nil
Drainage	Reactive	£1,186,471	£1,186,471	£1,186,471
	Planned	£300,000	£300,000	£300,000
Traffic Signals	Reactive	£67,000	£67,000	£67,000
	Planned	nil	nil	nil
Safety barriers/Post and Rail *	Reactive	£38,500	£38,500	£38,500
	Planned			

* Reimbursement costs as a result of vehicular accidents are pursued from insurance companies

7.4 Long Term Funding Requirement – Planned / Reactive

Asset	Funding Type	Service Level	2018/19	2019/20	2020/21
Carriageways (Predicted Budget)	Planned	Steady State	£2,330,000	£2,330,000	£2,330,000
	Planned	Overall network improvement	£2,600,000	£2,600,000	£2,600,000
Predicted Carriageway funding to maintain existing steady state of 4.3% of the network requiring maintenance and to achieve aspirational state of 4.0% with steady improvement.					
Footways	Planned	Steady State	£375,000	£375,000	£375,000
	Planned	Overall network improvement	£765,432	£765,432	£765,432
Full Footway condition survey completed in summer 2019. Results to be used to predict annual budget required for steady and aspirational state.					
Structures	Planned		£1,195,000	£945,000	£1,445,000
Street lighting	Planned		£4,100,000	£3,592,000	£900,000
Illuminated Signs	Reactive		£50,000	£50,000	£50,000
Signs	Reactive		Not available	Not available	Not available
Drainage	Planned		£250,000	£250,000	£250,000
Traffic Signals	Reactive		Not available	Not available	Not available
Safety Barriers	Planned		£30,000	£30,000	£30,000
Safety barrier inventory / condition survey completed May 2018 from which future budget requirement will be determined.					

7.5 Asset Valuation

Asset Type	Gross Replacement Cost	Accumulated Consumption	Depreciated Replacement Cost	Annualised Depreciation Cost
Structures	306,523,000		247,847,598	860,000
Carriageway	839,454,000		736,848,000	9,634,000
Footways & Cycle Tracks	149,021,000		107,883,000	2,162,000
Street Lighting	16,000,000*		Not available	Not available
Signs	Not available		Not available	Not available
Drainage	Not available		Not available	Not available
Traffic Signals	Not available		Not available	Not available
Street Furniture	26,780,000**		13,229,000	1,283,000

* Based on Prudential Capital sum borrowed to replace 95% of existing stock over a 5 year period.

** Based on actual renewal costs averaged per metre run on sample jobs for removal of old, erect new and traffic management costs.

8 Risk Management

8.1 Corporate Risk Management Policy

The Council is committed to the management of risk in order to:

- Meet statutory duties;
- Safeguard stakeholders to whom the Council has a duty of care;
- Support delivery of the Council's Corporate Plan and associated priorities;
- Protect physical and information assets and identify and manage potential liabilities;
- Ensure effective stewardship of public funds, securing value for money for the public purse;
- Preserve and protect the reputation of the Council; and
- Build a risk savvy workforce where innovation and a responsible approach to risk taking is part of its culture.

For the purpose of this policy, risk is defined as:

"the threat that an event, action or inaction will adversely affect

the Council's ability to successfully achieve its improvement objectives and deliver services."

Risks are categorised as "strategic risks" or "operational risks":

Strategic Risks: Risks which may threaten the achievement of an organisation's longer term strategic goals and objectives and are often the responsibility of Senior/Executive Management to monitor and report on.

Operational Risks: Risks which affect the organisation at the business unit or department level.

Effective risk management is also promoted through:

Chartered Institute of Public Finance and Accountancy (CIPFA)/Society of Local Authority Chief Executives (SOLACE)

Guidance – in 2012, CIPFA published an addendum to its report "*Delivering Good Governance in Local Governance: Framework"* which urged local authorities to prepare a governance statement in order to report publicly on the extent to which they comply with their own code of governance on an annual basis. This should include how the effectiveness of their governance arrangements in the year have been monitored and evaluated whilst also setting out any planned changes in the next period. The governance statement includes the Council's risk management policy, processes and their effectiveness.

The Local Government (Wales) Measure 2009

Introduced a duty on the Council to "make arrangements to secure continuous improvement of its functions". In discharging this overall responsibility, the Council is responsible for putting into place proper arrangements for the governance of its affairs, facilitating the effective exercise of its functions, including arrangements for the management of risk.

The Well-being of Future Generations (Wales) Act 2015

(Statutory guidance) emphasises the importance of considering long term risks that will affect the delivery of the Council's services and outcomes for our communities. The sustainable development principle should be used to frame the risks that we have identified in the short, medium and long term and, through the steps we have said we intend to take to meet our well-being objectives, we should demonstrate that risks are well managed.

Where should risk management be applied?

Risk management should be embedded in a range of processes:

- Include risk assessments in decision making reports. There is a standard heading within the Council's corporate template for reporting risk assessments related to the topic being reported;

- Maintain risk registers for all functions, partnership, contracts,

programmes and projects;

- Include progress made in implementing the risk management policy and in particular progress made in addressing risks assigned to particular officers within performance reviews;

- Include risk assessments and key actions into business planning and corporate planning activities; and

- Identify risks associated with budget savings, new income generation activities and other financial proposals.

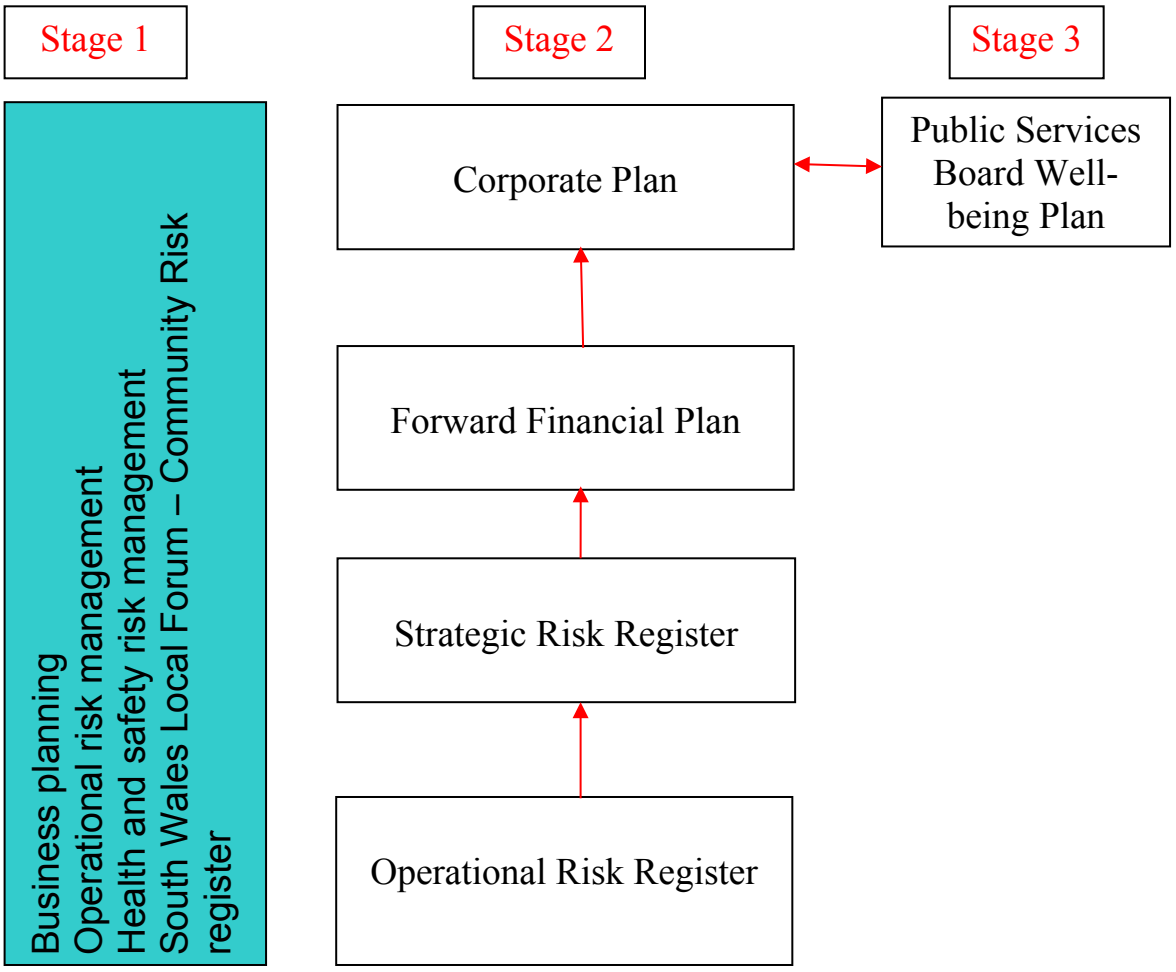
The Council's Corporate Risk Management Framework (figure 8.1.1 overleaf) set out in this policy is designed to ensure risks are identified, analysed and evaluated and managed at the right level in the Council.

- Stage 1 – relates to risk identified within services and functions.

- Stage 2 – covers risk assessment at the strategic level which will provide information to inform both the Council's Forward Financial Plan and the Council's Corporate Plan.

- Stage 3 – is the mechanism by which risks can be shared with partners via the Public Services Board.

Figure 8.1.1 Risk Management Framework



Insurance

Insurance arrangements are in place for funding the financial consequences of some risks. However, it should be recognised that some elements of loss will be uninsurable e.g. damage to employee morale and the damage to the Council's reputation.

8.2 Risk Appetite

Risk appetite is defined as “the level of risk that the Council and its Leadership team are willing to take on, accept, tolerate or be exposed to in pursuit of the Council’s objectives.” When deciding our risk appetite, we will consider the options available to us, the risks that we can take and those which we need to avoid or reduce as a priority.

The Council is a complex organisation and it is important to understand that the Council’s risk appetite may be different in some areas than in others. The risk management framework has therefore been designed to ensure that risk appetite for the most significant risks identified is determined by the Cabinet acting together.

The risk registers provide a mechanism for capturing risk appetite for individual risks and to ensure that all risks are being managed within Limits that have been assessed and determined as being acceptable.

8.3 Risk Management Process

Step 1 – Risk Identification

Risks can be identified through a range of different mechanisms. Some of the main methods that will be used include the following processes:

- **Corporate Planning** – risks that could impact on the Council’s Ability to deliver its vision and well-being objectives will be set out in the Corporate Plan;

• **Business Planning** – risks that could impact on the achievement of the service/function will be identified within the business plans;

• **Operational Practice** – risks identified through, for example, child protection practice, MAPPA, MARAC, adult safeguarding etc will inform the identification of risk within the operational and strategic risk registers;

• **Business Continuity and Emergency Planning** – critical activities and functions that have to continue as a minimum during the disruption of service delivery or when responding to an emergency will be identified within business continuity and emergency plans;

• **Health and Safety at Work** – processes for evaluating the risks arising from hazard(s) taking into account the adequacy of any existing controls, and deciding whether or not the risk(s) is/are acceptable, are embedded across the Council. External quality assurance of the arrangements are routinely undertaken to ensure risks are being prioritised, resourced and evaluated at operational, service and strategic levels;

• **Technical briefings, national reports and best practice** – are important sources to identify new/emerging risks that may be relevant within the Council's local circumstances; and

• **Analysis of lessons learned, previous losses, complaints, events, incidents** – are all valuable sources of evidence to draw upon when considering risk.

Step 2 – Analysis and Assessment

Once identified, risks should then be assessed as to their likelihood and consequences of occurrence, existing controls in operation and the extent to which further mitigating action is needed. See Figure 2 for details.

We should consider first the **inherent** risk – this is the risk we have assessed in its uncontrolled state, before any current controls have been considered. Once we have an assessment of the inherent risk we then need to assess the value of existing controls in order to arrive at a current/residual risk score. Having arrived at the residual risk, consideration then needs to be given as to whether further actions are needed and whether the risk should be contained within the operational risk register or escalated to corporate directors to assess whether the risk should be contained within the strategic risk register.

There are three main courses of actions to consider when deciding on further mitigation:

Accepting the risk – this is when it is considered that no further action is necessary to manage the risk beyond the routines that are already in place and subject of monitoring;

Treating/controlling the risk – this will be appropriate when it is considered the risk is not within tolerance and needs to be reduced to a more acceptable level;

Transfer the risk – this might be through insuring the risk through the Council's insurers, transferring service delivery to another organisation;

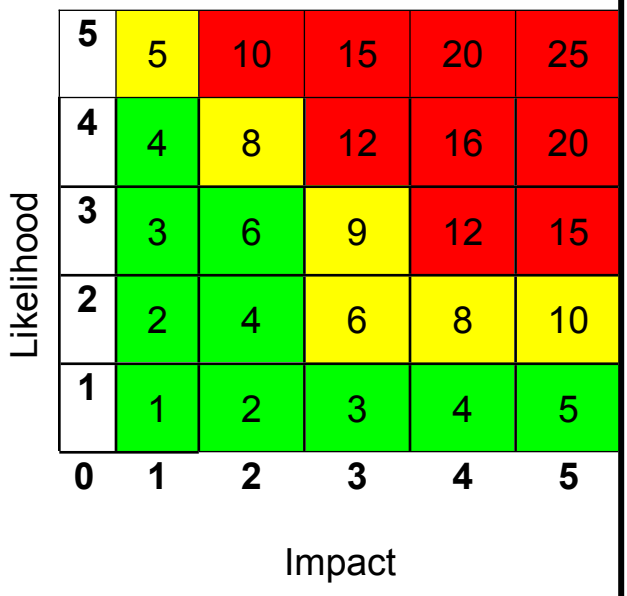
Operational Risk Analysis – each directorate management team is responsible for identifying risks to be entered onto the Operational Risk Register, supported by the performance management support officer. Work will be informed by the processes described in Step 1. Directorate management teams will also identify risks to the Corporate Directors' Group that may be suitable for inclusion on the Strategic Risk Register.

Strategic Risk Analysis – The Corporate Directors' Group is responsible for identifying risks that should be contained in the Strategic Risk Register. The Strategic Risk Register will set out the main risks to the delivery of the Council's services. The Corporate Directors Group will be responsible for advising the Cabinet on the strategic risks facing the Council.

The risk assessment is undertaken utilising the 5x5 risk evaluation matrix overleaf:

Table 8.3.1 Risk Matrix

Key	
Likelihood	**Impact**
1. Very likely	1. Low
2. Unlikely	2. Low / Medium
3. Likely	3. Medium
4. Very Likely	4. Medium / High
5. Certainty	5. High



Low Risk Medium Risk High Risk

The impact of the risk should be assessed on the basis of:

- Reputation
- Finances
- Significant service / operational change

The table overleaf provides a framework for scoring the likelihood / impact of risk occurring.

Likelihood	Description (% = guidelines)	Score	Impact	Description	Score
Very Unlikely	• 0 to 10% chance of occurrence • Has rarely / never happened before • Exceptional circumstances	1	**Low**	• No financial loss • Negligible loss, delay or interruption to services • Can be easily and quickly remedied	1
Unlikely	• 10% to 40% chance of occurrence • Not expected to happen but is possible • Once in 3 or more years	2	**Low/ Medium**	• Minor financial loss (i.e. up to £500K) • Minor loss, delay or interruption to services (i.e. 0 – 6 months) • Short term impact on operational efficiency and performance • No external interest	2
Likely	• 40% to 60% chance of occurrence • May occur at some time (i.e. within this financial year)	3	**Medium**	• Medium financial loss (i.e. 500K – 3M) • Significant loss, delay or interruption to services (i.e. 6 – 12 months) • Medium term impact on operational efficiency and performance • May attract short term attention of legislative or regulatory bodies	3

Likelihood	Description (% = guidelines)	Score	Impact	Description	Score
Very Likely	• 60% to 90% chance of occurrence • Circumstances occasionally encountered but not a persistent issue (e.g. once every couple/ few years • Has happened elsewhere within the UK in the last decade	4	**Medium /High**	• Major financial loss (i.e. £3M - £10M) • Major loss, delay or interruption to services (i.e. 1 -2 years) • One off event that could destabilise the Council • Widespread medium to long term impact on operational efficiency, performance and reputation • Will attract medium term attention of legislative or regulatory bodies	4
Certainty	• 90% to 100% chance of occurrence • Is expected to occur in most circumstances frequently encountered: daily / weekly / monthly /annually • Imminent / near miss	5	**High**	• Huge financial loss (i.e. £10M +) • Total sustained loss, delay or disruption to services (i.e. 2 years +) • Long term impact on operational efficiency, performance and reputation • Serious breach, national impact with rapid intervention of legislative or regulatory bodies	5

Step 3 – Monitoring and Review

At least once a quarter, each operational risk will be reviewed and updated. Residual risks which carry a medium or high rating will be formerly considered at directorate management team meetings where the necessity for further mitigation is to be considered. Following consideration at the management team meetings, risks which continue to carry a high score must be escalated to the Corporate Directors Group.

Corporate Directors' Group will review entries on the strategic risk register at least quarterly. Risks will be revised in light of progress made in mitigating those risks. Corporate Directors Group will also consider high risks escalated from directorate management teams. In considering escalated risks, corporate directors will consider whether further mitigation is required and whether the risks escalated should remain in the operational register or should be placed on the Strategic Risk Register.

The Strategic Risk Register will be reported by the Corporate Directors Group to the Cabinet on a six monthly basis.

The medium and high risks contained in the Operational Risk Register will be reported to the relevant cabinet boards on a six monthly basis by the relevant head of service/director.

It is recognised that there will be times when events can materialise that will required a more agile response. To ensure that such events routinely trigger a review of the Operational or Strategic risk registers, risk management will be a standing item on all management meetings across the Council.

8.6 Major Asset Risks

Table 8.6.1 below gives an indication of what have been / are considered to be NPT's Major Asset Risks:-

Table 8.6.1 – Major Asset Risks

Risk	Current Controls in Place
Carriageways	
The Carriageway Lifecycle plan and Status and Options Report indicates that if current expenditure levels and treatments are maintained the condition of the highway asset will continue to deteriorate and that an additional £500,000 / year is required to stand still.	Regular condition surveys (SCANNER and SCRIM for classified and visual for unclassified) keep engineers informed. The introduction of preventative treatments into the forward works programme whilst not stopping deterioration could help slow it down.
Safety Fencing	
Condition of barriers throughout the County Borough.	Survey identified main risks throughout the County Borough which were dealt with via a 3 year renewal programme, other than those sites associated with edge deterioration that require special funding which are ongoing.

Risk	Current Controls in Place
Structures	
Cymmer Bridge Deficiency in Principal Bridge Inspections.	Weight restriction and signal controlled one way working in place. Diversionary route being designed. New regime implemented resulting in a full cycle of principal bridge inspections being undertaken which may identify unplanned maintenance issues.
Drainage	
Any significant requirements that may arise from the Flood Risk Management Plan. Gap in knowledge on gully carrier drains. Condition of ageing highway culvert crossings	Mitigating factors identified as part of the Plan. Inventory currently being undertaken. Surveys being undertaken to identify condition.
Street Lighting	
Column collapse and electrical system failure.	Problems identified in the 2006/07 Lifecycle Plan led to an options appraisal being undertaken, which resulted in a major infrastructure renewal programme being completed.

9 Improvement Plan

9.1 Milestones

Improvement action plans for each asset group are included in the relevant lifecycle plan. Table 9.1.1 below indicates improvements to date, together with key milestones identified for implementation as part of this Plan.

Table 9.1.1: Summary of Performance Gaps and Action Plan

Performance Gap	Milestone / Actions	Target Date
General		
Working practice	Transition to new Code of Practice Complete gap analysis of working practices vs new Codes of Practice	Some areas reviewed and completed – analysis ongoing
Carriageways		
Surface condition data gap	Extended carriageway visual condition surveys to all thoroughfares on both the classified and unclassified network Utilise Survey Team to identify condition on scale 1 to 4 Update condition survey	Complete Complete Complete
Need to review management of road c'way pavement with respect to skid resistance	Review approach and further develop strategy as necessary, making appropriate amendments to the HAMP and Highway Maintenance Plan as required.	Ongoing.

Performance Gap	Milestone / Actions	Target Date
Improved methods required for targeting of roads for preventative maintenance	Work nationally to develop 'deterioration modelling' to assist with works programming – since previous HAMP, condition data surveys have provided improved means to inform forward work programmes.	2019 - 2022 Ongoing works in line with the CSSW national asset management framework contract.
Risk assessment and pavement management	Continue to explore potential benefits of the application of risk exposure indices in works programming.	Ongoing
Integrated computerised maintenance system for improved efficiencies	Development of in-house 'system' using GIS.	Ongoing
Detailed overview of potential road schemes with costs, measurements and inventories	Development of a preparation pool to assist with maintenance planning and prioritisation.	Ongoing
Insufficient coordination with utilities for Forward Works Programme	Develop forward works programme to be coordinated where necessary with utilities.	Gas 5 year works plan received and incorporated into the programme consideration process.
Removal of some sound road surface in maintenance techniques.	Development of 'fit for purpose' preventative maintenance solutions as cheaper, sustainable and more environmentally friendly alternatives.	Trial areas identified through condition survey and incorporated into HAMP

Performance Gap	Milestone / Actions	Target Date
Footways		
Update condition of footway network	Utilise Survey Team to identify condition on scale 1 to 4 condition data used in preparation of annual works programme.	Most recent (7th) survey completed in 2019
Improvement in coordination with utilities for Forward Works Programme	Develop forward works programme to be coordinated where necessary with utilities companies.	Gas utilities 5 year works plan received with planning underway. Ongoing
Risk assessment and works programme management	Continue to explore potential benefits of the application of risk exposure indicies in works works programming.	Ongoing.
Reduce expensive maintenance costs.	Development of preventative maintenance regime and use of new treatments as cheaper, sustainable and more environmentally friendly alternatives	Ongoing
Implement Inventory Population Strategy.	Gather bridge element data through biennial general inspection programme.	Ongoing
Structures		
Implement Bridge condition indices	Transfer Condition data into CSSW/Atkins Spreadsheet to allow direct comparison with other Welsh Authorities	Ongoing
Incomplete Bridge Detail Drawings/ Records	Transfer Survey and Microfilm details into AutoCAD Drawings	Ongoing
Bridge Key performance indicators	Extend KPI register to include for BCI, Availability, Reliability & Work bank	Ongoing
Retaining wall gaps	Complete survey of retaining walls	Ongoing
Principal inspections on major structures	Principal inspections programmed (52 No.)	Ongoing

Performance Gap	Milestone / Actions	Target Date
Compliance with the UK Bridges Boards Code of Practice for Highway structures	Implementation of the code's recommendations	Ongoing
Formal maintenance selection process	Prioritisation system to be applied to work bank	Ongoing
Drainage		
Minimal knowledge of the condition of highway culvert crossings	Instigate a condition survey of the critical highway culvert crossings. Will be dependent on additional resource and funding.	2020
Planned drainage maintenance on roads with a speed limit of 40mph and over	Implementation of a thorough survey and cleanse of the drainage infrastructure on all roads within this category	Ongoing
Lack of detail for connecting drains forming part of gulley / highway drainage systems	Instigate inventory of connecting drains forming part of gulley / highway drainage systems.	Ongoing
Lighting		
Address aged lighting stock	Implement Lighting Renewal Project for street lighting (excludes illuminated signs)	complete
Gap in data of underground cabling	Complete inventory of authority owned underground cable	ongoing
Gap in data of controlled crossing infrastructure	Complete inventory & condition survey of controlled crossing infrastructure	complete
No long term controller replacement investment profile	Identify investment profile for controller replacement to end of plan period	complete
No long term Signal refurbishment investment profile	Identify signal refurbishment investment profile to end of plan period	complete

Performance Gap	Milestone / Actions	Target Date
Highway Signs		
Signs missing or need attention	Replacement of absent signs when identified – problems significantly reduced since last HAMP following investment under the Neighbourhood Service initiative.	Ongoing
Cleaning Backlog	Neighbourhood Services to complete cleaning backlog and thereafter continue with cyclical cleaning in accordance with HAMP	Routine maintenance on-going.
No rolling programme of replacement	Identify replacement programme starting with life expired stock	Continuous inspection / replacement regime in place
Crash Barriers		
95% of safety barriers data held in inventory	Maintain inventory/condition data for safety Fences	3rd condition survey completed in 2018.
Other Assets		
No maintenance programme for other assets	Establish maintenance programme e.g. street furniture	Existing survey data to be rationalised. Development of programme for collection of required asset inventories – ongoing

10 Management & Control of the Plan

10.1 Responsibility for Delivery

The following people are charge with the delivery of this Highway Asset Management Plan. Their roles are as follows:

Post / Position	Name	Role
Environmental Management Team	Not applicable	Draft approval of the HAMP
Streetscene and Engineering Cabinet Board	Not applicable	Approval of the HAMP
Capital Programme Steering Group	Not applicable	Monitoring of financial information relating to the HAMP
Head of Streetcare Services Highways and Drainage Manager Neighbourhood Services Manager Lighting Services Manager	Mike Roberts Steve Owen Andrew Lewis Mike Key	Allocate and prioritise resources to facilitate implementation of asset management strategies and provide a link to corporate strategies in consultation with other sections as necessary.
Asset / Traffic & Programme Manager Highways Asset Management Officer	Ian Carter Steve Bevan	Co-ordinate asset management, development and updating of the HAMP and associated documents, monitoring and implementation of various improvement actions.
GIS Manager – Senior Assistant	Mike Thomas	Holder of the asset inventory and condition data.

Departmental Finance	Sian Davies	Provision of any financial information required in relation to the HAMP.
Network & Programme Manager Engineering Manager Lighting Services Manager Drainage Manager Street-Scene Manager	Ian Carter Hasan Hasan Mike Key Colin Deere Andrew Lewis	Implement / support development of the HAMP and asset management strategy. Input to updates of HAMP documents and production of integrated works programmes and reactive highway maintenance.

10.2 Review and Update

The HAMP document will be reviewed on a three year cycle and the appendices updated periodically as required.

Position	Frequency	Date of Next Update
HAMP	3 yearly	April 2022
Appendices	As required	Not applicable