Portfolio Holder for Highways

County Hall
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5 July 2017

For further information please contact

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NOTICE OF INTENDED PORTFOLIO HOLDER DELEGATED DECISION

The Portfolio Holder has received the following report for a decision to be taken under delegated authority. The decision will be taken on **11 July 2017** (i.e. 3 clear days after the date of this note). The decision will be published on the Council's website but will not be implemented until 5 clear days after the date of publication of the decision) to comply with the call-in process set out in Rule 7.37 of the Constitution.

1.	**HIGHWAYS ASSET MANAGEMENT PLAN (HAMP)**

(Pages 3 - 190)

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CYNGOR SIR *POWYS* COUNTY COUNCIL.

PORTFOLIO HOLDER DELEGATED DECISION
By
COUNTY COUNCILLOR Liam Fitzpatrick
(PORTFOLIO HOLDER FOR HIGHWAYS
July 2017

REPORT AUTHOR **Head of Highways, Transport & Recycling**

SUBJECT: **Highways Asset Management Plan (HAMP)**

REPORT FOR: **Decision**

1.0 Summary

1.1 This report outlines the strategy for the continued development of the Highways Asset Management Plan (HAMP)

2.0 Proposal

2.1 To adopt a strategic approach to the management of the highway asset valued at £4.366 billion and incorporating 5,800 km of road and 1,600 bridges based on the HAMP model being developed with the County Surveyors Society Wales (CSSW) through core documents including:

- Policy Statement;
- Highways Asset Management Plan (HAMP);
- Annual Status and Options Reports (ASOR) for key asset types;
- Road Maintenance Manual.

3.0 Options Considered/Available

3.1 Update the existing HAMP (2007) format
The HAMP was approved in 2007 with a financial update in 2009. It was successful in supporting Local Government Borrowing Initiative (LGBI) funding bids which attracted over £14million of grant for road maintenance between 2012 and 2015. The structure of the document is not considered to align with current best practice.

3.2 Collaborate with Welsh Authorities through CSSW to develop a revised HAMP
Since 2007 CSSW and all Welsh Authorities have continued to develop and enhance the original HAMP suite of documents with support from external consultants that specialise in highway asset management. This has latterly been in collaboration with the Scottish equivalent of CSSW, the Society of Chief Officers for Transportation in Scotland (SCOTS). This has produced a new document framework and asset management toolkit. This includes condition/cost models that provide a comparative

assessment of different funding strategies for key asset groups as well on guidance for assessing asset condition. CSSW are proposing to continue with a further three year development programme to ensure that HAMPs reflect best practice and the pressures on highway budgets.

3.3 Produce an autonomous HAMP

An individual style HAMP could be developed in-house. External consultants could be used to support the process where needed which would require a separate formal commissioning strategy outside of the CSSW procurement arrangement.

4.0 Preferred Choice and Reasons

4.1 The preferred choice is option 3.2, to collaborate with Welsh Authorities through CSSW to develop a revised HAMP. This will complement the Medium Term Financial Strategy (MTFS) Project Support funding of £195k between 2015 and 2018 which includes an element for development of a HAMP.

4.2 Information from recent reports and publications (summarised below) demonstrate the condition of and pressures on roads throughout Powys, These support the principle that a new HAMP is required to ensure appropriate information is available to inform service decisions that will assist in targeting funding appropriately and provide a liability defence.

4.3 The latest Welsh Government Statistical Bulletin SB 9/2017 on Road Lengths and Conditions, 2015-16 shows that Powys has the highest percentage of Welsh local authority road network in need of further investigation at 19% compared with the next highest Council at 13.2% and Welsh average of 11.2%.

4.4 “Powys 2020: Vision for the future” recognises that:

> We [Powys County Council] will need to reduce our expenditure on Highways significantly over the next few years as our budgets reduce. More targeted maintenance work and increased efficiencies will be required but we will not be in a position to maintain our network to the same standard.

4.5 The Powys Public Services Board Well-being Assessment 2016 (Draft) analysed 33 situations to identify which have the most detrimental and most favourable impact on the seven wellbeing goals in Powys. Whilst most assessments only affected one or two wellbeing goals, there was one particular goal, ‘Travelling around Powys’, which has a direct negative impact on four of the wellbeing goals (Prosperous, Resilient, Cohesive and Vibrant Wales). If there is no intervention then the potential negative effects in the medium-term are anticipated to extend to a further two of the wellbeing goals Healthier and Equal Wales). The only wellbeing goal not having an identified impact is a Responsible Wales.

4.6 The existing CSSW/SCOTS arrangement to support HAMP development has reached a conclusion and a new contract will be set up with CSSW and an external highways asset management specialist. Indications are that all Welsh Authorities are interested in participating.

4.7 The key benefits of such an arrangement are:

- Potential for all Welsh Authorities to work to a common theme including a joint approach to managing liabilities and legal conformity;
- Authorities in direct control of the direction of travel;
- Procurement of specialist asset management services through a lead Welsh authority;
- Range of workshops to help develop asset management understanding, principles, documentation, modelling tools;
- Opportunities to share best practice;
- Focus on Welsh issues and connections with Welsh Government;
- Access to future Welsh Government funding opportunities;
- Potential for lower costs with group procurement and development.

4.8 There have been a number of key changes since the 2007 HAMP was produced. The two principle ones are: a change of accounting methodology to the Whole of Government Accounts system; the publication of new guidance on highway asset management. Both will impact on the way that highways are managed in the future.

4.9 Whole of Government Accounts (WoGA) is based on CIPFA developed methodology that has changed the way the value of authority assets are determined. This places greater demands on asset inventory data to ensure it is to an appropriate standard. This may require future investment to collate and record additional Powys data. Whilst it has little direct impact on day to day highway asset management at this time it offers Welsh Government the potential to allocate future funding on a different, potentially needs driven, basis. The WoGA valuation for highway assets in Powys is £4.366 billion with carriageways (roads) accounting for £3.92bn and structures (predominantly bridges) being the next highest category valued at £0.288bn. These values exclude land costs.

4.10 The UK Roads Liaison Group (UKRLG) have published new guidance to replace the previous Well Maintained Highways suite of publications. Whilst not legally binding the new publication, Well-managed Highway Infrastructure - A Code of Practice published in October 2016, represents industry best practice guidance and offers a new risk-based approach. Welsh authorities are proposing to jointly assess the recommendations of the document through a CSS working group in an effort to provide a consistent Welsh approach. It is recommended that authorities seek to assess and implement the recommendations of the code within 2 years of publication. Failure to do this could expose the council to additional liabilities and potential increase in insurance premiums and settlements.

4.11 Sample HAMP documents are included as addendums to this report as follows:

4.11.1 HAMP Policy Statement **(Addendum 1)**

A high level overarching document to set the scene and show commitment in the application of asset management principles.

4.11.2 Highways Asset Management Plan (HAMP) **(Addendum 2)**

A key document setting out the proposed level of service and investment for the current period. The plan would focus on managing existing assets and liabilities. It may be used to inform decisions on new assets and the potential future costs of maintenance. The document will be within corporate policies and budget allocations.

4.11.3 Annual Status and Options Report (ASOR) **(Addendums 3a & 3b)**

This will be a suite of documents covering each of the key asset types with examples for carriageways (roads) and structures (bridges etc) included. They will be factual containing information such as spend, condition, customer demand & satisfaction and key risks. Options will be included for different levels of service. As factual information documents they are intended to inform service/budget decisions.

Carriageways represent the largest value element of the highway asset (see para 4.9 above). The example ASOR for carriageways provides sample output based on Powys data in support of the approved Capital funding bid of £11.85 million over 3 years as approved by Council on 23rd February 2017.

4.11.4 Maintenance Manual **(Addendum 4)**

This will offer guidance or detail on how certain tasks will be carried out e.g. highway inspections will be undertaken at pre-determined intervals with guidance as to what will be looked at and how identified problems will be managed. This is because range of permutations and outcomes that could be presented will vary depending on location and other factors. The manual will require Portfolio Holder approval.

4.12 A Single Integrated Impact Assessment (SIIA) for the HAMP development strategy has been undertaken and is included as Addendum 5. This concludes that the highway asset provides indirect support to many other service areas and therefore strategic decisions may impact on a number of service areas. The update of the HAMP to reflect current best practice and strategic direction will ensure that the council is able to direct investment in an appropriate manner and will provide a robust defence for litigious challenges. Further assessment may be required as elements of the HAMP strategy are developed.

4.13 Place Scrutiny Committee may wish to review the HAMP during the course of its development.

5.0 Impact Assessment

5.1 Is an impact assessment required? Yes/~~No~~

5.2 If yes is it attached? Yes/~~No~~

6. Corporate Improvement Plan

6.1 The Plan sets out the vision, values and principles for the Council and provides a framework for the developing HAMP to support.

6.2 The plan's guiding principles are based on the well-being of future generations. The Well-being of Future Generations (Wales) Act 2015 is about improving the social, economic, environmental and cultural well-being of the nation. The draft Well-being assessment 2016 demonstrates the significance the HAMP will play in supporting the plan (paragraph 4.5 above refers).

7.0 Local Member(s)

7.1 Local Members have the opportunity to raise matters and discuss progress on schemes through the regular area liaison meetings.

8.0 Other Front Line Services

8.1 Does the recommendation impact on other services run by the Council or on behalf of the Council? ~~Yes~~/No.

8.2 There are no overarching impacts at this time. Issues may be identified as the HAMP documents are developed that could impact on operational practice.

9.0 Communications

9.1 Have Communications seen a copy of this report Yes/~~No~~?

9.2 Have they made a comment? Yes/~~No~~?
If Yes insert here:
No proactive communication action required at this stage.

10.0 Support Services (Legal, Finance, Corporate Property, HR, ICT, Business Services)

10.1 The Highways and Enforcement Solicitor is content with the proposal. Further Legal input will be required as the specific parts of the HAMP develop.

10.2 The Capital and Financial Planning Accountant notes that the CSSW toolkit will become a prime financial system for the authority. Assurance will be required for the Strategic Director Resources and Wales Audit

Office that the systems are robust and have adequate controls in place to safeguard the information. The financial year that the valuation change will take place is being determined by CIPFA and may well be 2017/18. This will change the way the Highway Network Assets are valued from historic cost to Depreciated Replacement Cost and bring the £4.366 billion mentioned in paragraph 4.9 into the accounts and the balance sheet.

11.0 Scrutiny

11.1 Has this report been scrutinised? ~~Yes~~ / No?

11.2 If Yes what version or date of report has been scrutinised?
Please insert the comments.
What changes have been made since the date of Scrutiny and explain why Scrutiny recommendations have been accepted or rejected?

12.0 Statutory Officers

12.1 The Strategic Director Resources (Section 151 Officer) notes the comments made by Finance.

12.2 The Assistant Solicitor to the Council (Assistant Monitoring Officer) has no further comment on the paper.

13.0 Members' Interests

13.1 The Monitoring Officer is not aware of any specific interests that may arise in relation to this report. If Members have an interest they should declare it at the start of the meeting and complete the relevant notification form.

Recommendation:	Reason for Recommendation:
1. To approve the Highways Asset Management Plan (HAMP) Policy Statement.	**To provide commitment to the use of asset management principles.**
2. To approve the adoption of a new HAMP format to be developed in collaboration with other Welsh authorities through the County Surveyors Society (Wales) and for the new format HAMP to be approved in due course by the Portfolio Holder for Highways	**To ensure the HAMP remains fit for purpose.**
4. To retain the existing approved HAMP until the new document is approved.	**To continue provision of structured asset management.**
5. To approve a review of Well-managed Highway Infrastructure - A Code of Practice to assess potential impacts on best practice in association with CSSW.	**To ensure best practice within highway asset management in Powys and reduce liabilities.**

Relevant Policy (ies):	Corporate Improvement Plan		
Within Policy:	**Y / ~~N~~**	**Within Budget:**	**Y / ~~N~~**

Relevant Local Member(s):	**n/a**

Person(s) To Implement Decision:	**Head of Highways, Transport and Recycling**
Date By When Decision To Be Implemented:	**On-going**

Contact Officer Name(s):	Tel:	Fax:	Email:
Shaun James Alastair Knox	01686 61 1810 01597 82 6608		shaun.james@powys.gov.uk alastair.knox@powys.gov.uk

Background Papers used to prepare Report:

[1] Welsh Government Statistical Bulletin SB 9/2017
Road Lengths and Conditions, 2015-16

[2] One Powys Plan 2014-2017

[3] Powys 2020: Vision for the future

[4] Powys Public Services Board Well-being Assessment 2016 (Draft)

[5] Powys County Council Budget book

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Powys County Council

Highways Asset Management Plan

Policy Statement

2017

INTRODUCTION

SCOPE

This policy applies to the creation, construction, acquisition, maintenance, and disposal of all Powys County Council (PCC) highway assets.

Corporate Improvement Plan

Powys' vision: "Strong communities in the green heart of Wales"

How Powys' priorities contribute to the seven national Well Being Goals

	Services delivered for less	Supporting people in the community	Developing the economy	Learning
A prosperous Wales	✓	✓	✓	✓
A resilient Wales	✓			
A healthier Wales		✓	✓	✓
A more equal Wales		✓	✓	✓
A Wales of cohesive communities	✓	✓		✓
A Wales of vibrant culture and thriving Welsh Language			✓	✓
A globally responsible Wales	✓			✓

A key goal is to provide a transport system that helps to keep people mobile and connected and responds to changing needs. Highway Infrastructure underpins the four PCC priorities and provides a significant contribution to the seven National Well-Being Goals.

POLICY OBJECTIVES

This policy provides guidance for overseeing the management of PCC highway infrastructure assets to ensure that:

- Legislative requirements are satisfied;
- Service delivery is based around the principles of asset management;
- Exposure to risk is limited to acceptable levels;
- The asset continues to deliver a service to the community at an agreed standard of service;
- There is clear information for Members and staff to make informed decisions;
- There are clear allocations of responsibilities for the management of each asset group.

DEFINITIONS

Asset: Any physical item that the council acquires or constructs which gives benefit or service to the community.

Asset Register: A record of asset information considered worthy of separate identification.

Asset Life: Time from acquisition to disposal or reconstruction.

Asset Management: Activities and practices through which PCC optimally manages its physical assets, and their associated performance, risks and expenditures over their lifecycle for the purpose of achieving the organisational strategic plan.

Highway Asset Management Plan (HAMP): A tactical plan for managing the Highway infrastructure over the life of the asset to allow the asset to be maintained at an agreed standard of service.

Level of Service: The desired measureable service standard set for an asset group.

Whole Life Costs: Total cost of an asset over its entire life including Capital and Revenue expenditure.

Capital Expenditure: Any expenditure that is used to procure or construct a new asset; upgrade the capability of an asset; make improvements to an asset; make additions to an asset or replace an asset.

Revenue Expenditure: Any expenditure that allows an asset to continue providing the agreed level of service standard until the end of life is reached.

POLICY DETAILS

1. Asset Planning

PCC will adopt an asset management planning approach for the management of highway infrastructure assets and where appropriate apply whole of life cycle cost analysis as advocated in publications such as the County Surveyors Society (CSS) Framework for Road Asset Management Planning and PAS 55.

Prior to acceptance proposed capital works schemes will be assessed to evaluate and prioritise proposals. For key asset groups a predetermined member approved criteria developed to satisfy the goals of the Corporate Plan and the Highways Asset Management Plan (HAMP) will be used.

Where appropriate predictive modelling will be used to develop and implement preventative maintenance programs to ensure lowest net life cycle costs.

2. Community Expectations

Information gathered from a range of sources including resident and user surveys; customer contact; demand and community liaison will be used to inform service changes to reflect customer expectations.

PCC will periodically review its asset inventory and identify opportunities for rationalisation in line with any identified requirement to support community expectations.

3. Risk Assessment and Management

PCC will programme regular inspections of the key asset groups to ensure the standard level of service is achieved through recording and identifying of defects.

PCC will maintain and review a Highway Asset Risk Register that will identify the risks associated with the Councils Highway infrastructure and record the controls in place to manage them.

4. Asset Accounting

PCC will maintain asset registers to support Whole of Government Accounting requirements at the level determined within the Highways Asset Management Plan. Data collected will aim to meet the specification set out in the CIPFA Transport Infrastructure Asset Code.

Specific asset life expectancies shall be determined for each key asset group or component based on a combination of past experience within Powys and current benchmarked standards.

Annual Depreciation costs will be calculated using a method set out in the transport asset valuation procedure and reported annually with gross replacement and depreciated replacement cost figures.

5. Budget Allocation

PCC's budgets for highways including the funding for all asset purchase, maintenance and replacement shall be informed by the HAMP.

The allocation of budgets to individual asset groups will be reviewed annually and take into account a range of factors including: the condition of each asset; the level of service achieved in the preceding year(s) shown in the Annual Status and Options Report (ASOR); community expectations and service aspirations. This will assist elected members and officers to allocate the available funding to the most appropriate asset group.

A rolling programme of proposed capital works will be maintained linked to the HAMP; financial plans and corporate strategies. The programme will aim to cover a 3 year period and be subject to review during that period to ensure it reflects current need.

6. Highways Asset Management Plan

The scope of the HAMP covers all of the Council's highway assets including elements such as roads (carriageways), structures (bridges, retaining wall), footways, street lights, traffic signals and street furniture.

The HAMP shall define the management strategies to be adopted throughout the life cycle of the asset.

The HAMP aims to set out for each asset group:

- Predicted future changes in demand;
- Standard level of service;
- The investment required in the maintenance, renewal and replacement of assets required to meet the levels of service considered;
- Methods of performance monitoring and appraisal including condition;
- Financial projections;
- The risks associated with the plan.

7. Highways Maintenance Manual

PCC will develop a Highways Maintenance Manual (HMM) setting out key aspects of how highway maintenance will be carried out. The HMM will aim to define how and when:

- Asset inspections are undertaken;
- Reactive repairs are categorised and prioritised;
- Asset condition is assessed;
- Sites requiring surface treatment are identified and prioritised;
- Choice of materials is selected;
- Works programmes are prepared;
- Works are procured and managed;
- Costs are recorded and reported;
- Customer enquiries are recorded and responded to.

8. Reporting

The Council will prepare an Annual Status Options Report (ASOR) for key asset elements that summarises:

- The status of each asset group in terms of its condition and PCC's ability to meet its reactive repair standards;
- The result of the previous year's investment in terms of meeting the target service standards;
- A range of options available for future operation of the asset in terms of short, medium and long term predictions of levels of defects and condition that can be expected for different budget levels;
- When the annual budget is set any amendment to the service standards specified in the HAMP will represent an update of the HAMP.

The ASOR will support Portfolio Holder decisions on future investment strategies and service levels.

9. Roles and Responsibilities

Council (Elected Members)

Council comprises all democratically elected members (County Councillors) from the electoral wards within Powys. Council may delegate some of the functions set out below to groups or individuals through the approved constitution.

- To agree a constitution that provides an operating framework including roles; responsibilities and delegated powers for elected members, committees and officers;
- To approve a highway asset management strategy with linkage to the Council's Corporate Plan;
- To approve the HAMP;
- To set agreed levels of service standard and levels of risk for key asset groups;
- To allocate budgets to achieve the levels of service standard set within the HAMP;
- To ensure appropriate resources for the determined level of asset management activities are made available.

Chief Executive Officer / Strategic Director / Head of Service

- To provide strategic direction and leadership;
- To ensure appropriate asset management policies are in place;
- To review existing policies and develop new policies related to asset management;
- To implement Highway Asset Management Strategies within agreed resources;
- To monitor and review managers and staff in achieving the Highway Asset Management Strategy;
- To ensure accurate and reliable asset information is presented to Members.

Managers and Staff

- To implement the asset management policy and plan with agreed resources;
- To develop ASOR's for key asset groups and promote improvement strategies for individual asset groups;
- To develop and implement maintenance (revenue) and capital works programmes in accordance with HAMP and budgets;
- To deliver levels of service to agreed risk and cost standards;
- To present information to the Council, Chief Executive Officer, Strategic Director and Head of Service to inform changes in asset management development.

Asset Management Working Group

An asset management working group will be established to assist and have input with strategic asset management planning. Specific staff responsibilities for asset management activities may be defined in the HAMP and reflected in individual position descriptions.

ASSOCIATED PROCEDURES AND RELATED POLICIES

- Constitution
- Corporate Risk Management Policy
- Corporate Asset Management Policy
- Financial Procedures

REVIEW DATE

To be determined.

Powys County Council

Highway Asset Management Plan

2017

Foreword

This plan sets out the council's strategy for the management of the council's highway asset for the future. It has been produced in accordance with national guidance and recommended good practice developed through the SCOTS/CSSW Road/Highway Asset Management Project with the assistance of exp consulting limited.

It is widely recognised that the application of modern asset management practices can enable improved value for money. In these challenging times it is essential that the council embraces these methods and strives to ensure that every penny spent is invested as wisely as possible. This plan forms an important part of the council's commitment to apply good asset management to highways.

The plan recognises the views of highway users and residents and in particular the importance that is placed upon our highway assets. Recent harsh winters have shown that our highways are susceptible to damage when bad weather occurs. It is essential that an appropriate level of investment is put into the highway network to maintain and ultimately improve one of the main principles of the council, that of the economic wellbeing of the locality.

Councillor Signature

Councillor Liam Fitzpatrick
Portfolio Holder for Highways

Document Control

Version Number	Amendments Made	Date
v1	Nil - Original	April 2017
Next Review Due		April 2018

Council Approval

Version Number	Council Committee	Date
v1		

Responsibility for the Plan

The responsibility for the delivery of and updating of this plan are shown below

Council Officer	Responsible for
Elected Member Responsible for Highways	Approval of the HAMP

Introduction

Overview

The Highway Asset Management Plan (HAMP) sets out the council's strategy for the management and maintenance of the highway asset. The "highway asset" includes carriageways, footways, structures, street lighting, traffic management systems, grassed areas and street furniture. The HAMP will be developed to encompass all key assets and will focus initially on those elements that are considered to be of high value or risk.

This Plan is consistent with the Council's corporate approach to asset management as set out in the following key documents:

- Powys 2020 Vision for the future
- One Powys Plan 2014 – 2017
- Medium Term Financial Strategy

The purpose of the HAMP is to:

- Formalise strategies for investment in highway asset groups
- Define service standards

The plan aims to improve how the highway asset is managed and to enable a better value for money highways service to be delivered.

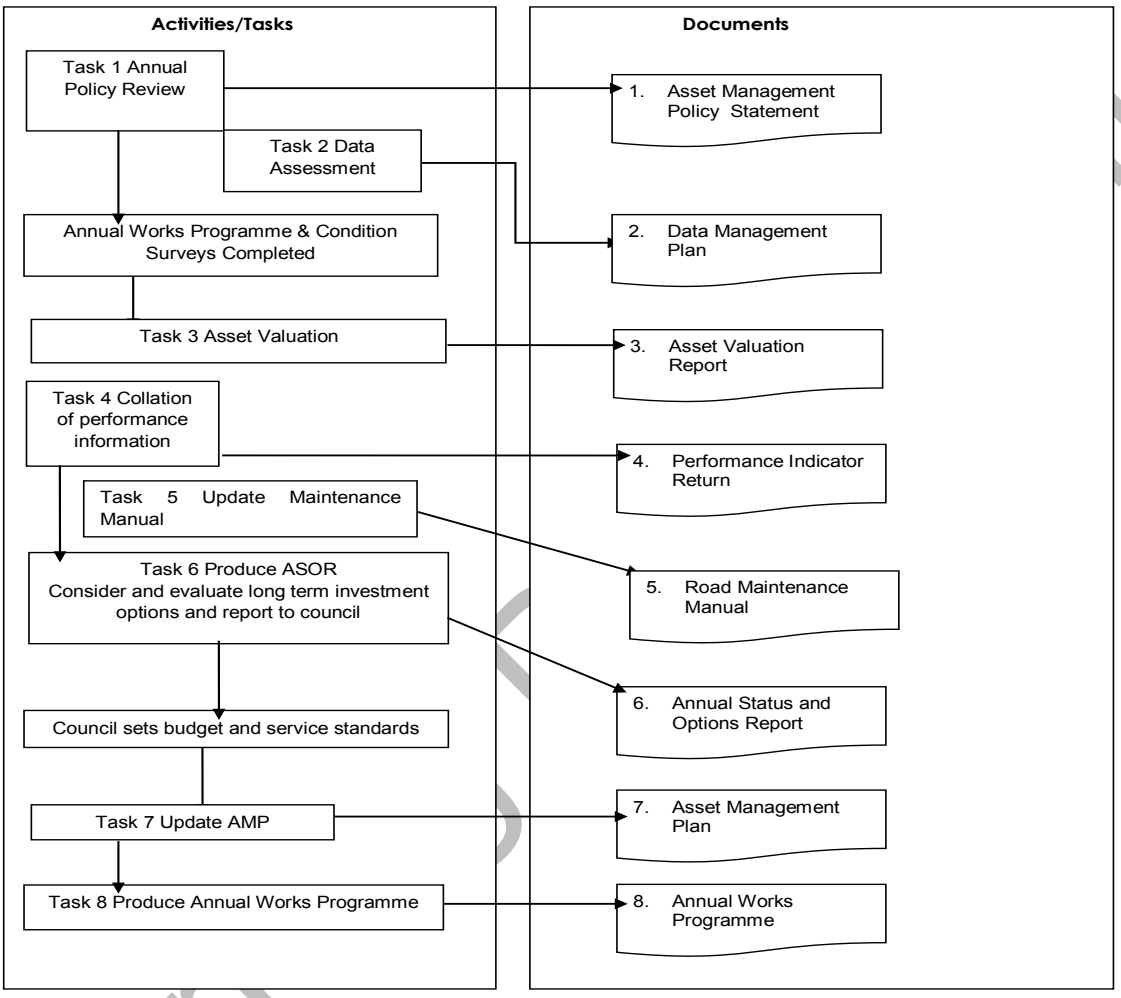
Corporate Asset Management

Management of the highway network requires linkages with other service assets primarily through:

- Joint liabilities on highways and Rights of Way reflected in the Rights of Way Improvement Plan (RoWIP);
- Property infrastructure used to support the delivery of highway services reflected in the Property Asset management Plan.

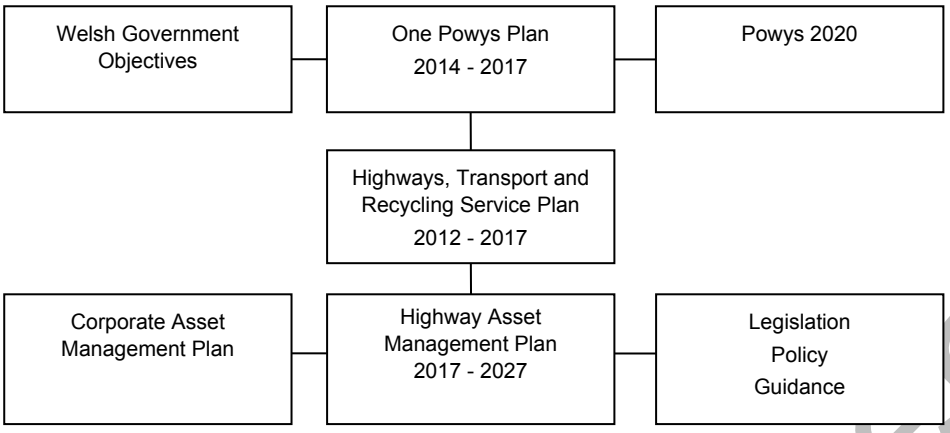
Society of Chief Officers for Transportation in Scotland (SCOTS) / County Surveyors Society Wales (CSSW)

This plan has been developed in accordance with the SCOTS/CSSW recommended asset management planning practices and is informed by the tasks and documents illustrated.



The HAMP is informed directly by the Mid Wales Joint Local Transport Plan[2], the Network Management Plan[3] and associated asset management planning documents. Targets and strategies contained in the HAMP are used to help develop annual works programmes based upon the council's highway budget allocation.

The following chart shows how the HAMP relates to other council plans



1. Highway Assets

Highway Assets

The council's highway assets covered by this plan are:

- Carriageways — 5,806 km (5,070 surfaced)
- Footways, footpaths & cycleways — 592 km
- Structures — 1,697 Bridges & Culverts,
  75 Footbridges
  254 Retaining Walls
  289 Cattle Grids
- Street Lighting — 11,435 Lighting Columns
  3,210 Pole / Building Mounted Lanterns
  1,499 Illuminated Signs, Flashing Lights and Bollards
- Traffic Management Systems — 22 Signalised Junctions
  33 Puffin / Pelican / Zebra Crossings
  135 School Crossing Signs
  24 Variable Message Signs
- Street Furniture — Approximately 50,000 non-illuminated highway signs

Assets Not Covered or Partially Covered

Assets not in included or partially included in this plan but which will be considered for inclusion in a future revision to the plan include:

- Road Drainage Infrastructure
- Weather Stations
- Public Conveniences
- Car Parks

Assets that are the responsibility of other parties and not covered by this HAMP include:

- Trunk Roads – managed by the North and Mid Wales Trunk Road Agent (NMWTRA) on behalf of Welsh Government
- Public Rights of Way – managed by PCC Leisure and Recreation Service
- Housing Estate roads and footpaths – managed by PCC Housing Service
- Private roads, footpaths and structures – responsibility of each asset owner
- Utility apparatus – responsibility of Statutory Undertakers and private companies
- Festive lighting, decoration and bunting – Normally managed by Town or Community Councils; community or private organisations under licence from PCC or NMWTRA.

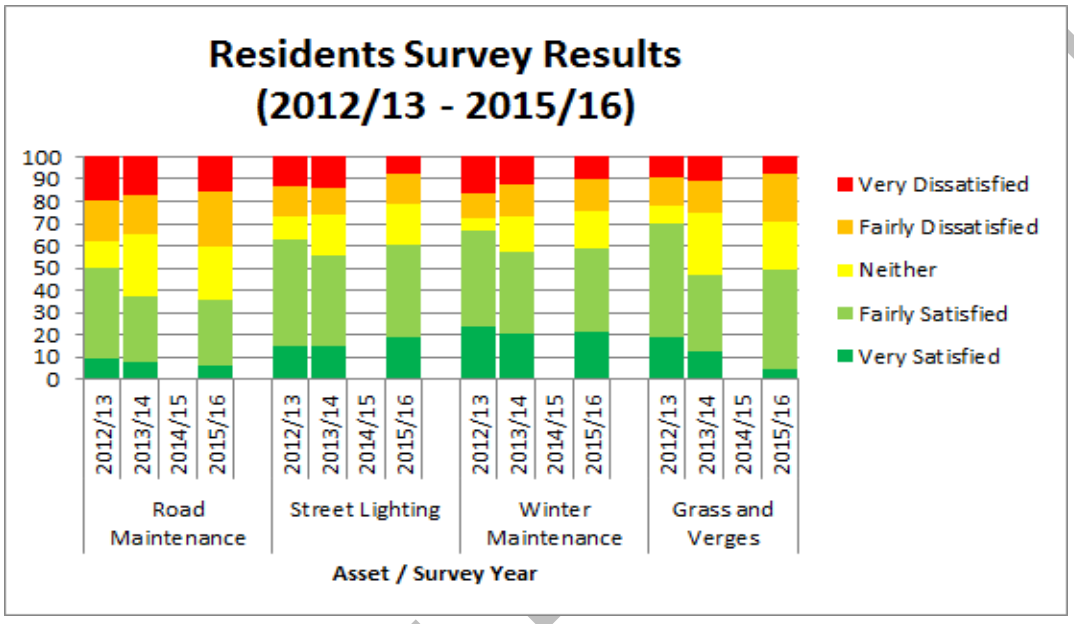
Inventory Data

This plan is based upon currently available inventory data for highway assets, i.e. carriageway, footway, structures, street lighting, traffic signals and street furniture. For some minor highway assets inventory data is not currently held, however, an attempt has been made to incorporate these assets within this plan using local estimates and sample surveys. A plan to improve asset data will form part of the council's Highway Asset Data Management Plan[6] which is due to be developed as part of the HAMP suite of documents.

2. Customer Expectations

Customer Preferences

Powys County Council commissions periodic 'Residents Survey'. The purpose of the survey is to provide the council with a snapshot of satisfaction/dissatisfaction with key services. The following chart shows the results for the highway assets over the last four years



Data Note: No survey in 2014/15

The results from the 'Residents Survey' have shown:

1. An increase in dissatisfaction with the maintainance and repair of the council's roads. Further examination of the results reveals the main reason stated for the dissatisfaction relates to the number of pot holes. This increase appears mainly due to the severe winters and flooding that occurred over this period and decrease in funding.

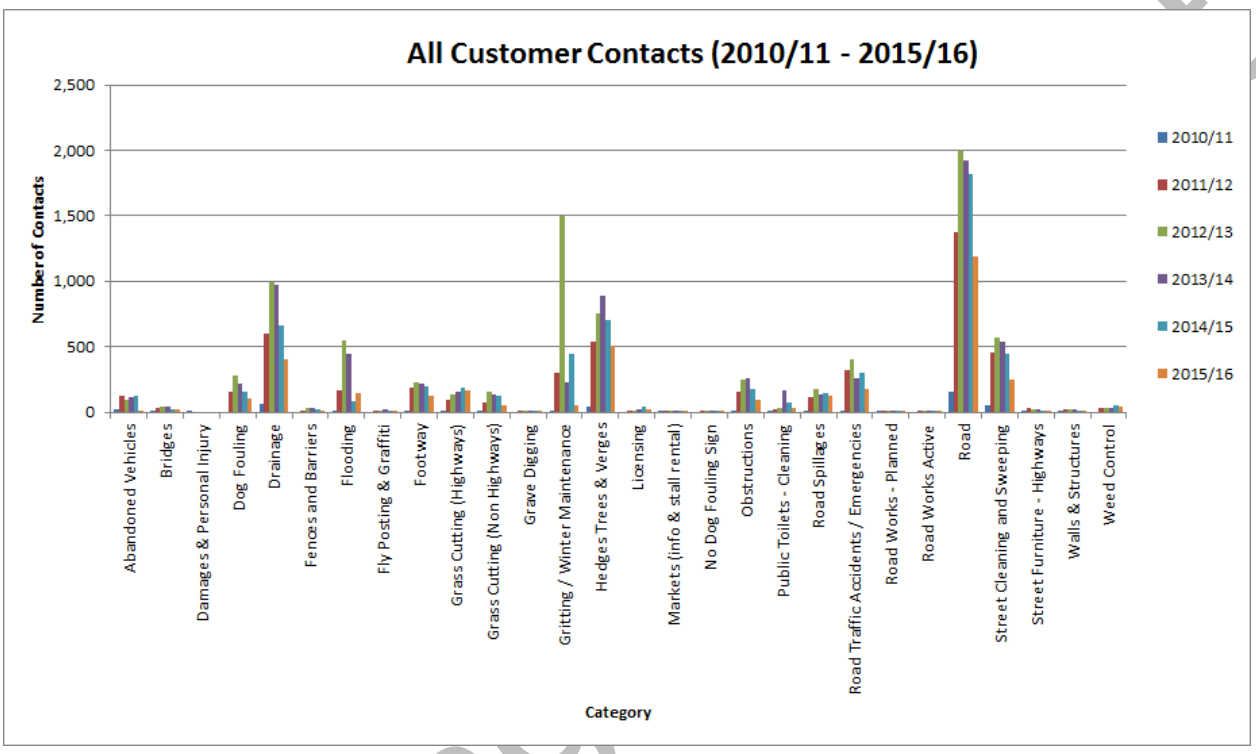
2. An increase in dissatisfaction with the maintenance of grass and verges due to the quality of the work and frequency of cutting.

3. Winter maintenance and street lighting satisfaction has remained reasonably consistent.

Customer Contacts

Customer contacts in relation to the highway assets are recorded in the council's customer relationship management system [Local Environment (LE) System].

A summary of the quantities of contacts received by category is shown below for 2010/11 to 2015/16. [This data needs updating to incorporate full 2015/2016 year]



The data shows that the category with the most customer contacts to the council is the 'Road'. This category represents the defects (mainly potholes) which reflects the current condition of the road.

The 'Drainage' asset is the second highest category reaching approximately 1,000 contacts in 2012/13 and 2013/14 when the significant winter storms caused widespread flooding.

Also of note is the number of contacts in regard to Hedges, Trees and Verges' problems which is reflected in the customer satisfaction survey reported above.

3. Demands

Asset Growth

The asset grows each year due to the adoption of new roads and construction of new road links. Over the last 5 years the surfaced carriageway asset has grown by 17.7km (0.35%) compared with 42.4km (0.845%) over the last 10 years[8]

New assets create the need for maintenance, management and associated funding in future years as these additional assets age. This is particularly relevant to street lighting as energy costs generally increase immediately due to rising energy prices.

Traffic Growth

Annual county road traffic survey data is not available to show the level of traffic growth. Welsh Government traffic volume data shows an increase of 5.5% over the last 5 year period[9].

Traffic in Powys comprises a mix of cars and taxis; light vans; goods vehicles; buses and coaches; motorcycles and pedal cycles. Large Goods Vehicles (LGV) have the greatest impact on road condition. Across Wales they represent 3% of County A road traffic volume[9]. Traffic counts within Powys indicate the percentage of LGV's can be in the order of 10% on some routes. This percentage is likely to increase in future years.

Powys is one of the main areas designated by the Welsh Government under the Tan8 policy for the development of wind farms. Whilst the majority of the routing of large Abnormal Indivisible Loads (AILs) carrying the tower sections, blades and nacelle units will be on the trunk road network, final access to sites will necessitate the use of the local highway network. These large vehicles, along with the construction traffic required for the building of the wind farms, forest harvesting and other developments will likely lead to a substantial increase in LGV movements using roads not engineered for this type of traffic. This is likely to result in major disruption on the network and cause significant damage to the roads, putting an additional strain on budgets.

Environmental Conditions

Pressure is being placed upon the asset as a result of environmental conditions including:

- Harsh winters: recent unseasonably harsh winters have caused significant damage to road surfaces resulting from freeze/thaw action.
- Flooding: occurrences in recent years have had a severe impact causing damage to property and the road network.

Well-being and Future Generations

- Well-being of Future Generations (Wales) Act 2015
- Powys Public Service Board, Well-being Assessment 2016

4. Service Standards

This plan is based upon delivering the service standards below. The standards reflect the funding levels in section 6. They are the standards that users (customers) can expect from the council's highway assets during the plan period. Details of how the specific measures shown below are calculated are included in the Highways Maintenance Manual.

Service	Measured By	Target Standard	
		Standard	Compliance
Carriageways			
Safety	Undertake routine safety inspections on Category 2 Strategic Routes at intervals of	28 days	%
	Undertake routine safety inspections on Category 3(a) Main Distributors at intervals of	28 days	%
	Undertake routine safety inspections on Category 3(b) Secondary Distributors at intervals of	28 days	%
	Undertake routine safety inspections on Category 4(a) Link Road at intervals of	3 months	%
	Undertake routine safety inspections on Category 4(b) Local Access roads at intervals of	6 months	%
	Category 1 defects shall be corrected or made safe within	24 hours	%
	Category 2 defects shall be rectified or made safe within	2 Months	%
Condition	Maintain the condition of all 'A' roads such that the percentage in a RED condition remains below	%	N/A
	Maintain the condition of all 'A' roads such that the percentage in a RED and AMBER condition remains below	%	N/A
	Maintain the condition of all 'B' roads such that the percentage in a RED condition remains below	%	N/A
	Maintain the condition of all 'B' roads such that the percentage in a RED and AMBER condition remains below	%	N/A
	Maintain the condition of all 'C' roads such that the percentage in a RED condition remains below	%	N/A
	Maintain the condition of all 'C' roads such that the percentage in a RED and AMBER condition remains below	%	N/A
	Maintain the condition of all 'U' roads such that the percentage in a RED condition remains below	%	N/A
	Maintain the condition of all 'U' roads such that the percentage in a RED and AMBER condition remains below	%	N/A

Service	Measured By	Target Standard	
		Standard	Compliance
Footways			
Safety	Undertake routine safety inspections on Prestige Area footways at intervals as described		100%
	Undertake routine safety inspections on Primary Walking Routes at intervals as described		100%
	Undertake routine safety inspections on Secondary Walking Routes at intervals as described		100%
	Undertake routine safety inspections on Linking Footways at intervals as described		100%
	Undertake routine safety inspections on Local Area Footways at intervals as described		100%
	Category 1 defects shall be rectified or made safe within	24 hours	100%
	Category 2 defects shall be rectified or made safe within	2 Months	100%
Condition	Maintain the condition of all footways such that the percentage meeting the condition rating level 4 remains below	%	N/A
	Maintain the condition of all footways such that the percentage meeting the condition rating level 3 & 4 remains below	%	N/A

Service	Measured By	Target Standard	
		Standard	Compliance
Street Lighting			
Safety	Electrical testing of all equipment shall be undertaken at a frequency of	6 years	100%
	Emergency faults shall be made safe or repaired within ? hours of notification		100%
Condition	The percentage of street lights not working as planned at any one time should be no more than	%	N/A
	The percentage of street light columns exceeding their ESL should be no more than	%	N/A
	A non-emergency fault s shall be rectified within ? working days (Single Outage)	%	100%
	A non-emergency fault shall be rectified within ? working days (Section Fault 3 lights or more)	%	100%
	Bulk replacement of lamps shall be undertaken every x years (except where lanterns have been replaced with LED units)	years	100%
	Night time scouting of the whole of the asset shall be undertaken at intervals of	days	100%
	Average annual electricity consumption per street light (kwHrs)	kwhrs	N/A

Service	Measured By	Target Standard	
		Standard	Compliance
Structures			
Safety	Carry out General Inspections on Class 1 & 2 Roads at a maximum frequency of X years. Excluding structures programmed for a Principal Inspection.	2 years	100%
	Carry out General Inspections on Class 3 and Unclassified Roads at a maximum frequency of X years. Excluding structures programmed for a Principal Inspection.	3 years	100%
	Carry out Principal Inspections at a maximum frequency of X years.	6 years	100%
	Carry out Scour Inspections at a maximum frequency of X years.	years	100%
	Attend emergency maintenance call outs within X hrs and make	hours	100%

Service	Measured By	Target Standard	
		Standard	Compliance
Structures			
	safe.		
	Attend non-emergency maintenance call outs within X hrs and make safe.	hours	100%
	Maintain all Structures such that the $BSCI_{ave}$ remains above	%	N/A
	Maintain all Structures such that the $BSCI_{crit}$ remains above	%	N/A
	Maintain all Structures such that the number of structures with a BCI_{ave} indicating a poor condition remains below		N/A
	Maintain all Structures such that the number of structures with a BCI_{crit} indicating a poor condition remains below		N/A
	Maintain all Structures such that the number of structures with a critical element with a BCI_{crit} indicating a poor condition remains below		N/A
	The total number of weight restricted bridges within the authority shall remain below		N/A
	The number of sub-standard structures subject to BD79 monitoring within the authority shall remain below		N/A

Service	Measured By	Target Standard	
		Standard	Compliance
Traffic Signals			
Safety	Attendance at Major faults shall be within 'X' hours		100%
	Attendance at Minor faults shall be within 'X' hours		100%
	Undertake electrical inspections for electrical assets at each installation every “X” years		100%
Condition	Initial repair of major faults shall be within 'X' hours		100%
	Initial repair of minor faults shall be within 'X' hours		100%
	Complete repair all faults within 'X' hours/days		100%
	Bulk lamp change of wait signals except amber every 'X'months		100%
	Bulk lamp change of wait signals amber every 'X'months	n/a led	
	Bulk lamp change of regulatory signs every 'X'months	n/a led	
	The percentage of traffic signal installations exceeding their ESL should be no more than	years	100%
	Damage repair of major faults shall be within "X" days		100%
	Damage repair of less urgent faults shall be within "X" days		100%
	Failed lamps shall be replaced within "X" days	hours	100%

5. Financial Summary

5.1 Planned Funding

The service standard targets shown in section 5 are based upon the following predicted funding levels. In future years the cabinet will decide upon the level of funding for the road taking into account the information and options supplied in the complimentary Asset Strategy and Options Reports (ASORs). Any updates required to the HAMP will then be made.

Section 5 of this HAMP is based upon the assumption that the funding levels remain the same for the next 3 years.

Asset	**Works**	**Funding Required £k**				**Long Term Funding Assumed £k**
		16/17	**17/18**	**18/19**	**19/20**	**Y3-Y20 pa**
Carriageways	Reactive	£	£	£	£	£
	Planned	£	£	£	£	£
Footways	Reactive	£	£	£	£	£
	Planned	£	£	£	£	£
Structures	Reactive	£	£	£	£	£
	Planned	£	£	£	£	£
Street Lighting	Energy Costs	£	£	£	£	£
	Reactive	£	£	£	£	£
	Planned	£	£	£	£	£
Traffic Signals	Energy/Communication Costs	Included in Street Lighting Energy Costs				
	Reactive	£	£	£	£	£
	Planned	£	£	£	£	£

Energy cost are shown at 2015 value although it is very likely that these will escalate significantly if recent trends in prices continue as they are predicted to do.

5.2 Historical Expenditure

Historical expenditure invested in works on the Road/Highway Asset is shown below:

Asset	Works	Historical Expenditure £'000				
		11/12	12/13	13/14	14/15	15/16
Carriageways	Capital					
	Revenue					
Footways	Capital					
	Revenue					
Structures	Planned					
	Routine & Reactive					
Street Lighting	Energy Costs					
	Planned					
	Routine & Reactive					
Traffic Signals	Energy/Communication Costs					
	Routine, Planned & Reactive					
Totals:						

The above information shows that there was a total drop in expenditure from 2008/09 and 2009/10 to 2010/11 and beyond of approximately 37%. In the three year period between 2007/08 and 2009/10 the Council had obtained external funding for improving the carriageway and footway asset. Carriageways and footways had the biggest drop in expenditure between 2009/10 and 2010/11, dropping to a level pre external funding.

5.3 Asset Valuation

As at March 2016 the highway asset is valued as follows:

Asset Type	**Gross Replacement Cost (GRC)**	**Depreciated Replacement Cost (DRC)**	**Annualised Depreciation Cost (ADC)**	**Comments**
Carriageways				
Footways & Cycleways				
Structures				
Street Lighting				
Traffic Management				
Street Furniture				
Total				

6. Asset Investment Strategies

The strategies in this section have been determined using predictions of future condition over a 20 year period. The predictions enable strategies to be created to look at the whole life cost of maintaining the asset. Using long term predictions means that decisions about funding levels can be taken with due consideration of the future maintenance funding liabilities that are being created. Investment strategies for the major asset types are summarised below. These strategies are designed to enable the service standards in section 5 to be delivered.

Investment between Asset Types

In comparison to historical investment future investment is planned to be:

- Carriageways: level of investment maintained at similar levels
- Footways: level of investment maintained at similar levels
- Structures: level of investment maintained at similar levels
- Street lighting; level of investment maintained at similar levels, plus additional investment in "spend to save" energy efficiency initiatives
- Traffic signals; level of investment maintained at similar levels

Carriageways

The overarching strategy for carriageways is to invest where possible in preventative maintenance in order to reduce the rate of deterioration of the asset.

The condition information indicates that the A & B roads are generally in a good condition with little strengthening or resurfacing maintenance required and may be allowed to deteriorate slightly and still be within the target standards.

The C and U roads will require a larger initial investment in resurfacing works in order to bring them up to the target standards prior to focussing on the preventative maintenance strategy.

Routine and reactive repairs are expected to continue at current levels and will require continued investment.

Category	Strategy	Comments				
Routine and Reactive Repair	Repair of defects to current intervention standards and response times.	The strategy requires the deployment of 12 works gangs on emergency and non-emergency repairs such as patching.				
Planned Maintenance Preventative	To catch roads in the initial stages of deterioration and prevent further deterioration.	The strategy is predicted to require the following annual approximate lengths of surface treatment:				
		Road Class	2016/17	2017/18	2018/19	2019/20
		A	km	km	km	km
		B	km	km	km	km
		C	km	km	km	km
		U	km	km	km	km
Planned Maintenance Corrective	Programme of resurfacing where the carriageway condition means a preventative treatment cannot be applied	The strategy is predicted to require the following annual approximate lengths of resurfacing:				
		Road Type	2016/17	2017/18	2018/19	2019/20
		A	km	km	km	km
		B	km	km	km	km
		C	km	km	km	km
		U	km	km	km	km
	Programme of strengthening where the carriageway condition requires a more substantial repair	The strategy is predicted to require the following annual approximate lengths of strengthening:				
		Road Type	2016/17	2017/18	2018/19	2019/20
		A	km	km	km	km
		B	km	km	km	km
		C	km	km	km	km
		U	km	km	km	km

Footways

The overarching strategy for footways is to invest where possible in preventative maintenance of bituminous footways in order to reduce the rate of deterioration of the asset.

The condition information indicates that the Flagged footways are generally in a good condition with only a small amount of resurfacing maintenance required in order to remain within the target standards.

The bituminous footways will require an initial investment in resurfacing works in order to bring them up to the target standards prior to focussing on the preventative maintenance strategy. A small amount of strengthening works is required where constant overriding of the footway is causing severe damage and a higher standard of construction will reduce this.

Routine and reactive repairs are expected to continue at current levels and will require continued investment.

<table>
<tr><th>Category</th><th>Strategy</th><th colspan="5">Comments</th></tr>
<tr><td>Routine and Reactive Repair</td><td>Repair of defects to current intervention standards and response times.</td><td colspan="5">The strategy requires the deployment of 12 work gangs on emergency and non-emergency repairs such as small areas of broken slab replacement and patching etc.</td></tr>
<tr><td rowspan="3">Planned Maintenance Preventative</td><td rowspan="3">A programme of preventative treatment of bituminous footways in the initial stages of deterioration.</td><td colspan="5">The strategy is predicted to require the following annual approximate lengths of footway surface treatments:</td></tr>
<tr><td>Footway Type</td><td>2016/17</td><td>2017/18</td><td>2018/19</td><td>2019/20</td></tr>
<tr><td>All</td><td>km</td><td>km</td><td>km</td><td>km</td></tr>
<tr><td rowspan="6">Planned Maintenance Corrective</td><td rowspan="4">Programme of resurfacing/renewal of footways.</td><td colspan="5">The strategy is predicted to require the following annual approximate areas of footway renewals:</td></tr>
<tr><td>Footway Material</td><td>2016/17</td><td>2017/18</td><td>2018/19</td><td>2019/20</td></tr>
<tr><td>Flagged</td><td>km</td><td>km</td><td>km</td><td>km</td></tr>
<tr><td>Bituminous</td><td>km</td><td>km</td><td>km</td><td>km</td></tr>
<tr><td rowspan="4">Programme of strengthening of footways.</td><td colspan="5">The strategy is predicted to require the following annual approximate areas of footway renewals:</td></tr>
<tr><td>Footway Material</td><td>2016/17</td><td>2017/18</td><td>2018/19</td><td>2019/20</td></tr>
<tr><td>Flagged</td><td>km</td><td>km</td><td>km</td><td>km</td></tr>
<tr><td>Bituminous</td><td>km</td><td>km</td><td>km</td><td>km</td></tr>
</table>

Street Lighting

The aim of the maintenance strategy is to ensure that all street lights are operating 99% of the time and all columns are in a safe condition. The night time inspection process enables 'dark lamps' to be identified and repaired within a seven day response time.

The structural testing programme enables columns in poor condition to be identified and replaced before an incident occurs.

The Council has developed a Carbon Management / Energy Reduction Plan which has highlighted major CO_2 emission savings available through improved street lighting management. All street lights which meet the appropriate criteria are turned off between midnight and 5am and a programme of lantern replacement with new energy efficient (LED) lanterns has been agreed where existing lanterns have become life expired.

<table>
<tr><th>Category</th><th>Strategy</th><th colspan="5">Comments</th></tr>
<tr><td>Routine and Reactive Repair</td><td>Repair of defects to current intervention standards and response times.</td><td colspan="5">The strategy requires the deployment of 3 number works gangs on emergency and other non-emergency repairs.</td></tr>
<tr><td rowspan="3">Planned Maintenance Preventative</td><td rowspan="3">Bulk lamp change</td><td colspan="5">The strategy is predicted to require the approximate annual quantities of lamp replacements per year:</td></tr>
<tr><td></td><td>2016/17</td><td>2017/18</td><td>2018/19</td><td>2019/20</td></tr>
<tr><td>Lamps</td><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="3">Planned Maintenance Corrective</td><td rowspan="3">Programme of structural renewal</td><td colspan="5">The strategy is predicted to require the following approximate annual quantities of columns to be renewed:</td></tr>
<tr><td></td><td>2016/17</td><td>2017/18</td><td>2018/19</td><td>2019/20</td></tr>
<tr><td>Columns Renewals</td><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="3">Carbon / Energy Reduction</td><td rowspan="3">Programme of lantern replacement</td><td colspan="5">The strategy is predicted to require the following approximate annual quantities of lanterns to be replaced with LED units:</td></tr>
<tr><td></td><td>2016/17</td><td>2017/18</td><td>2018/19</td><td>2019/20</td></tr>
<tr><td>Lantern Renewals</td><td></td><td></td><td></td><td></td></tr>
</table>

Structures

The Council has identified

Routine maintenance needs are different for each structure type. These have been identified and estimated average amounts of annual work have been used to identify the works and funding requirement.

Category	**Strategy**	**Comments**				
Routine and Reactive Repair	Routine repair of defects to current intervention standards and response times.	The strategy requires the deployment of 5 work gangs/other agencies on emergency and other non-emergency repairs. (Bearing replacement, Waterproofing replacement, Painting, Joint repair/ replacement, Pointing etc.)				
Structure Type	**Work Type**	**Total No of Structures Requiring Works**	**Works for 2016/17**	**Works for 2017/18**	**Works for 2018/19**	**Works for 2019/20**
Road Bridges	Structure Strengthening Works					
	Parapet Upgrade Works					
Pedestrian Bridges	Structure Strengthening Works					
	Parapet Upgrade Works					
	Support Upgrade Works					
Culverts and Subways	Structure Strengthening Works					
	Parapet Upgrade Works					

Traffic Signals

The aim of the traffic signals maintenance strategy is to ensure that all traffic signals are operating 99% of the time and all equipment remains in a safe condition. Installations are replaced only following obsolescence due to life expiry or external damage.

Where possible installations are replaced as a whole rather than replacing individual items of equipment.

Category	Strategy	Comments				
Routine and Reactive Repair	Repair of defect to current intervention standards and response times.	The strategy requires the deployment of 2 work gangs/other agencies on emergency repairs and other non-emergency repairs.				
Refurbishment of signalised junctions	Refurbishment of junction that have deteriorated or the equipment has become obsolete/unreliable	The strategy is predicted to require the approximate annual quantities of junctions to be renewed:				
			2016/17	2017/18	2018/19	2019/20
		Junction Renewals				
Refurbishment of signalised crossings	Refurbishment of junction that have deteriorated or the equipment has become obsolete/unreliable	The strategy is predicted to require the approximate annual quantities of pedestrian crossings to be renewed:				
			2016/17	2017/18	2018/19	2019/20
		Pedestrian Crossing Renewals				

7. Risks to the Plan

The risks that could prevent achievement of the standards specified in this plan (section 6) are:

Plan Assumption	Risk	Action If Risk Occurs
The plan is based upon winters being normal	Adverse weather will create higher levels of detects and deterioration than have been allowed for.	Budgets and predictions will be revised and this plan updated if abnormally harsh winters occur.
Available budgets have been assumed as shown in section 7	External pressures mean that government reduce the funding available for roads	Target service standards will be revised to affordable levels
Construction inflation will remain at level similar to the last 5 years.	Construction inflation will increase the cost of works (particularly oil costs as they affect the cost of road surfacing materials)	Target service standards will be revised to affordable levels.
Levels of defect and deterioration are based on current data which is limited for some assets (e.g. footways)	Assets deteriorate more rapidly than predicted and the investment required to meet targets is insufficient.	Split between planned and reactive maintenance budgets will be revised.
Resources are available to deliver the improvement actions	Pressures on resources mean that staff are not allocated to service improvement tasks such that the predicted benefits cannot be fully achieved	Target dates will be revised and reported.

The risk has been evaluated in accordance with the councils corporate risk management strategy [4] .In addition to the risks above a Road/Highway Asset risk register is maintained recording the risks associated with each asset type. A review of this register is used annually when programmes of works are developed.

References

1) Asset Management Policy
2) Mid Wales Joint Local Transport Plan 2015
3) Network Management Plan
4) Highway Asset Maintenance Manual
5) Annual Status and Options Report
6) Highway Asset Data Management Plan
7) Service Improvement Action Plan
8) Welsh Government Road Length data
9) Welsh Government Traffic Volume data

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Highway Asset
Annual Status & Options Report
Carriageways and Footways
2015/16

Powys County Council

W o r k i n g D o c u m e n t

1 Introduction

This report presents a summary of the council's carriageway and footway assets as at March 2016. It

- Describes the current condition of the assets
- Details the service that the assets and current budgets are able to provide
- Presents options available for the future

The report complements the Highway Asset Management Plan (HAMP). It provides information to assist with setting budget and service levels for carriageways and footways.

1.1 Status

The status of each asset group is provided in terms of current condition, the known outputs that are delivered, the standards being achieved and, where possible an indication of customer satisfaction.

1.2 Options

The report considers the following options:

- A continuance of current funding levels
- The predicted cost of maintaining current standards
- Predicted effect of a preventative strategy
- The projected costs of specified service levels

1.3 Long Term Forecasts

Road assets generally deteriorate slowly. The impact of a level of investment cannot be shown by looking at the next couple of years. The report includes 20 year forecasts to support decision making with an understanding of their long term implications.

1.4 Impacts Risk

To reflect continuing budgetary pressures the report contains an assessment of the impact for each option presented. The level of information available is considered appropriate to the risks however more detailed information would enable more accurate predictions.

2 Carriageways

2.1 Key Issues

1. Local Government Borrowing Initiative (LGBI) between 2012/13 and 2014/15 resulted in improvements to the asset. Current investment levels are around 30% of pre LGBI levels.
2. Current investment levels (c£2m) are well below predicted steady state (c£8m) and thus ongoing deterioration is predicted.
3. C road condition is poor (25% red requiring treatment, 42% amber requiring investigation)
4. Unclassified road condition is unknown but unclassified roads make up 42% of the network.
5. The current planned maintenance return periods for each road type using the current budget are in the order of:
   - A Roads – 13 years
   - B Roads – 33 years
   - C Roads – 118 years
   - Unclassified Roads – 181 years
6. Current methods of planned maintenance spend would not deliver the best out-turn in the long term as a preventative approach is predicted to improve condition (based upon an £8m pa budget) by 10% compared to current methods, hence a change of approach is recommended along with increased investment.
7. Reduced capital spend increases reactive maintenance which places pressure on revenue allocations and cyclic activities.
8. Repairing defects will likely become unsustainable at current budget levels.
9. Customers are less satisfied and the trend is likely to continue at current investment levels.

2.2 Status Report

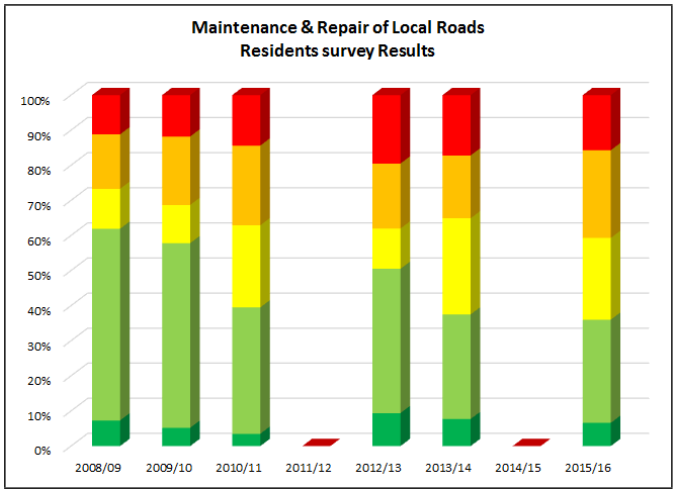
Asset Group: Carriageway (Surfaced)

The Asset

Statistics

Road Class	Urban Length (km)	Rural Length (km)	Total Length (km)
A Road	30.0	208.2	238.2
B Road	52.5	551.6	604.1
C Road	59.7	2,042.3	2,102.0
Unclassified Road	217.0	1,908.3	2,125.4
Total Length (km)	359.2	4,710.4	5,069.6

Customer Expectations



Commentary

- The annual residents survey results show a general downward trend in customer satisfaction since surveys started in 2008/09.
- Further examination of the results reveals the main reason for dissatisfaction relates to the increase in number of pot holes.
- Data Note:
  No Surveys carried out in 2011/12 and 2014/15.

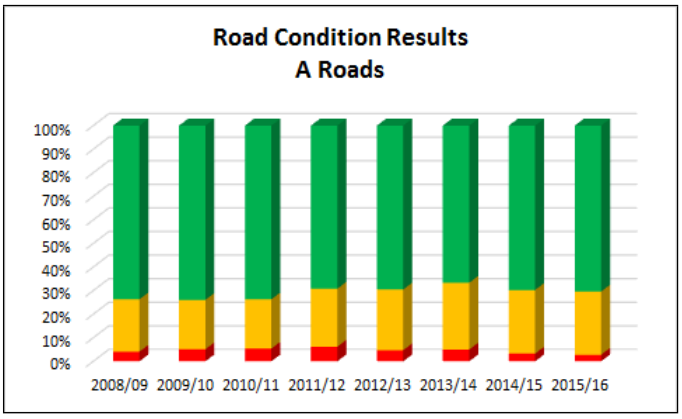
Customer Contacts

Data to be assessed

Commentary

- The majority of contacts relating to carriageways are associated with potholes.
-

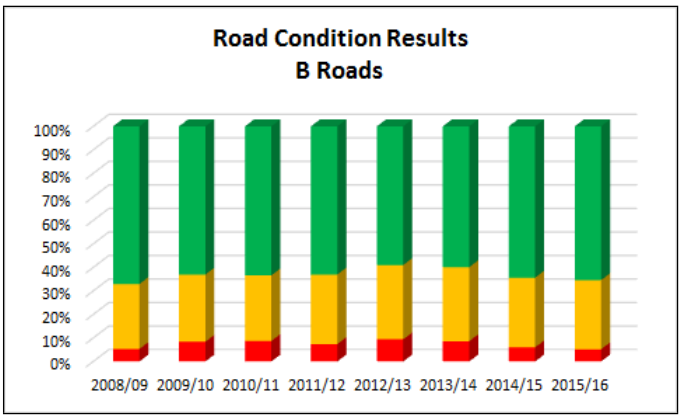
A Road Condition



PCC Red Condition	2.8%
Wales Rural Peer Group (WRPG) Average Red Condition (As at 2014/15)	3.8%
PCC's rank within WRPG (As at 2014/15)	3 / 9

- The carriageway red condition level of 3.3% is considered good and is better than the average of the WRPG.

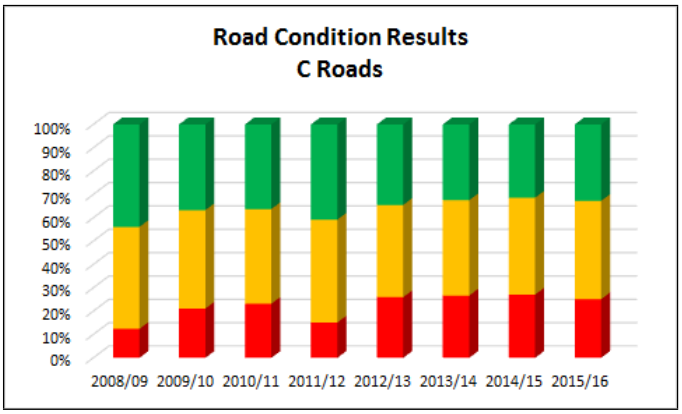
B Road Condition



PCC Red Condition	5.2%
WRPG Average Red Condition (As at 2014/15)	5.3%
PCC's rank within WRPG (As at 2014/15)	7 / 9

- The carriageway red condition level of 5.2% is considered an acceptable level and is close to the average of the WRPG.

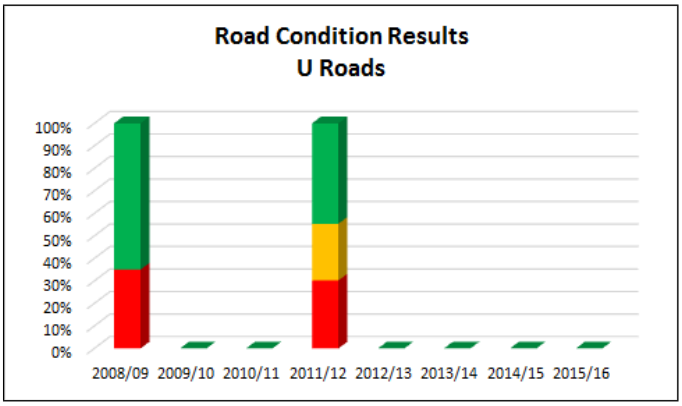
C Road Condition



PCC Red Condition	25.1%
WRPG Average Red Condition (As at 2014/15)	16.4%
PCC's rank within WRPG (As at 2014/15)	9 / 9

- The carriageway red condition level of 25.1% is the lowest of all Welsh Local Authorities and below the WRPG average.

U Road Condition



- The last condition survey undertaken on unclassified roads was in 2011/12 using a 'Detailed Visual Inspection' (DVI) process.
- At that time the condition was Red 30%; Amber 25%.

Category 1 Defects	To be assessed	•
Category 2 Defects	To be assessed	•
Historical Investment	To be assessed	•

Investment and Output (2015/16)

Cost Category	£10,764k	Output
Planned Maintenance - Preventative	£1,165k	• Surface Dressing (£1,165k)
Planned Maintenance - Corrective	£3,061k	• Resurfacing • Major Drainage • Footways • Remedial Earthworks
Routine Cyclic Maintenance	£4,977k	• Grassed areas maintained (safety & amenity) • Gullies and drains cleaned • Potentially dangerous defects repaired (e.g. potholes) • Fabric of highway repaired e.g. patching, drainage repairs • Asset inspected to identified defects, assist with work planning and provide a defence to claims
Routine – Reactive Repairs (emergency)		
Routine – Reactive Repairs (non-emergency)		
Routine – Inspection & Survey		
Operating Costs	£1,418k	• See Winter Maintenance Plan
Improvements	£143k	• Road Safety Schemes

Budget expenditure is recorded at the minimum level required to meet reporting criteria for Welsh Government financial returns.

Valuation

Gross Replacement Cost	£3,922,119,000
Depreciated Replacement Cost	£3,574,927,000
Annualised Depreciation Charge	£25,652,000

The annualised depreciation (AD) was £25.7m which represents the average amount by which the asset will depreciate in one year if there is no investment in renewal of the asset.

Asset Group: Carriageway (Surfaced)	
	Commentary
Current Strategies	• Planned Maintenance Strategy – potential sites for treatment are identified during routine inspections and from adhoc service demand. A priority rating is allocated to each site using the PCC Matrix which incorporates factors for the level of defects and customer and member importance. *I*dentified highway assets schemes (capital programme) are ranked together with the highest ranking schemes being considered for Planned Maintenance funding allocations. • Reactive Maintenance Strategy - objective is to repair defects within the appropriate response times which are currently 24 hours to make safe a Category One Defect and 28 days for full repair. Category 2 defects have response times ranging from 2 months to an expectation of 24 months depending on the response category assigned.
Current Status	As at 31 March 2016 ↘ annual budget decreasing over time ↘ deterioration of measured condition ! budget constraints putting pressure on corrective and reactive works ↘ decreasing customer satisfaction as a result of increasing reactive repairs.

2.3 Carriageway Options

The predictions included below have been created using a cost projection tool developed under the SCOTS.CSSW Highway Asset Management project. The projections are based upon assumed average rates of deterioration for each road class. Input condition for unclassified roads has been assumed to be as per 2011/12 DVI partial network survey as this is the only information available at this time.

The projections are aimed at providing a range of scenarios to inform discussion and assist in decision making.

2.3.1 Option C1: Maintain Current Budget and Spend Profile

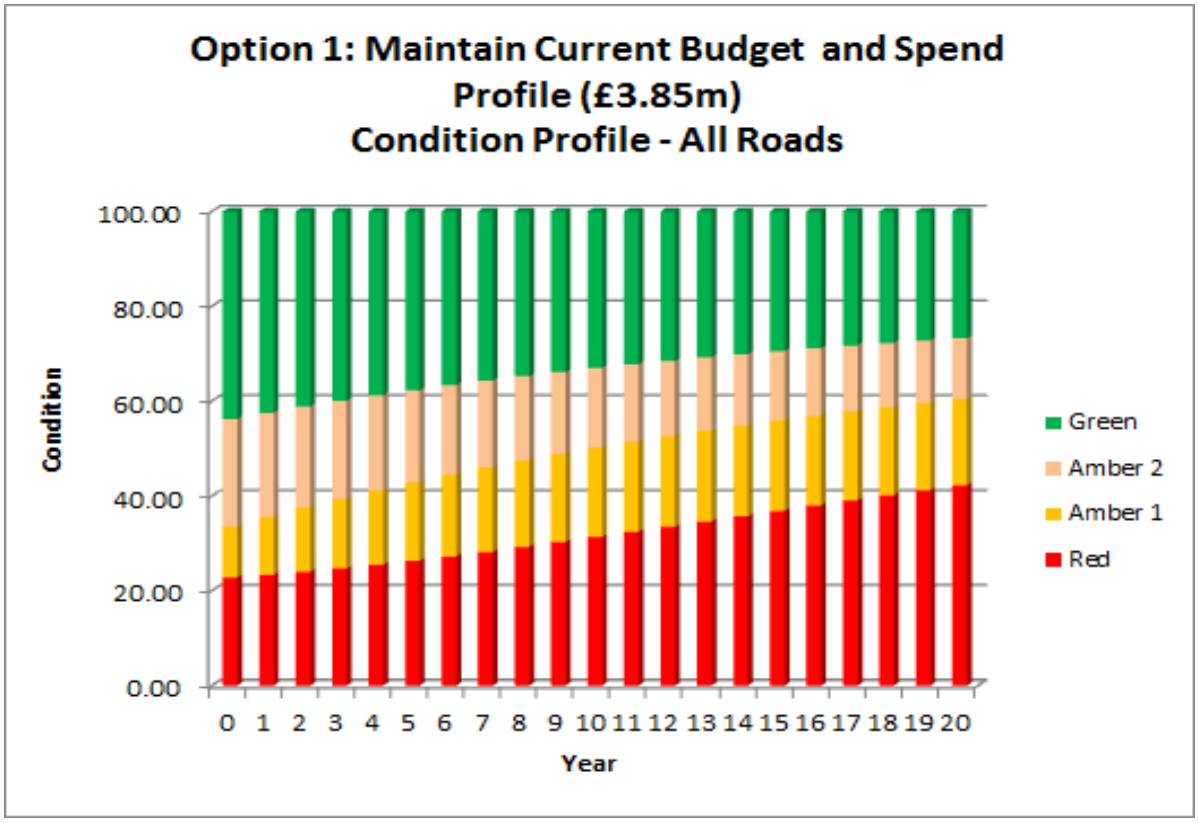
Budget

Continuance of 2015/2016 funding levels invested predominantly in resurfacing which is a longer life corrective treatment. This strategy targets the worst condition roads, red and amber 1, aiming to eliminate lengths of road where reactive defects have or are starting to appear.

The allocation between road type and treatment type is shown in the following table.

Option 1: Maintain 2015/2016 Budget and Spend Profile of £3.85m				
Annual Budget: £3,851,161 for 2015/2016, reduced to £2.67m for 2016/2017				
Road Category	Urban / Rural	Strengthening Treatment	Resurfacing Treatment	Surface Treatment
Classified (A) Roads	Urban	£0	£45,716	£97,415
	Rural	£0	£364,832	£472,038
Classified (B) Roads	Urban	£0	£239,805	£58,250
	Rural	£0	£760,309	£126,250
Classified (C) Roads	Urban	£0	£60,159	£156,019
	Rural	£0	£777,487	£113,250
Unclassified Roads	Urban	£0	£258,037	£83,528
	Rural	£0	£179,817	£58,250
Treatment Totals		£0	£2,686,161	£1,165,000

Predicted Condition



The predicted condition chart shows that this option will lead to continued deterioration of the carriageways over time resulting in the percentage of carriageway in need of maintenance (red + amber condition) increasing from the current 56% to 73% in 20 years. The red condition will increase from 23% to 42%

Option C1 Summary

The baseline option of a continuance of 2015/2016 funding levels is predicted to result in:

- ↘ deterioration of measured condition
- ↗ increasing quantities of defects
- ↗ potential for increase in 3rd party claims
- ↘ probable reduction in customer satisfaction as a result of increased defects and reduction of service.

2.3.2 Option C2: Maintain Current Budget using Preventative Strategy

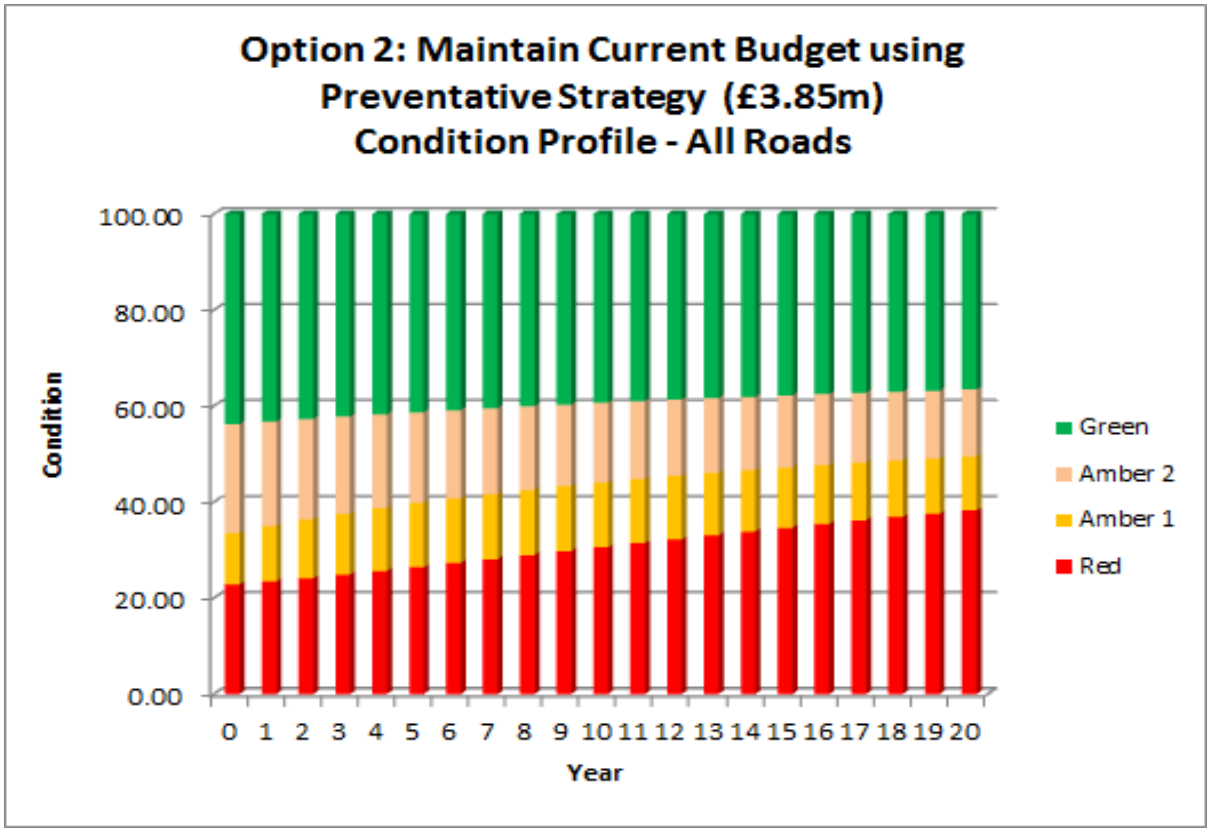
Budget

Continuance of 2015/2016 funding levels invested predominantly in surface dressing which is a shorter life preventative treatment. This strategy targets amber condition roads aiming to extend the life by treating defects before they reach a level where corrective treatment is required.

The allocation between road type and treatment type is shown in the following table.

Option 2: Maintain Current Budget Using Preventative Strategy (£3.85m)				
Annual Budget: £3,851,161				
Road Category	Urban / Rural	Strengthening Treatment	Resurfacing Treatment	Surface Treatment
Principal (A) Roads	Urban	£8,000	£34,939	£100,192
	Rural	£70,000	£294,832	£472,038
Classified (B) Roads	Urban	£20,000	£219,805	£58,250
	Rural	£88,656	£177,312	£620,591
Classified (C) Roads	Urban	£21,618	£43,236	£151,325
	Rural	£89,074	£178,147	£623,516
Unclassified Roads	Urban	£34,157	£68,313	£239,096
	Rural	£23,807	£47,613	£166,647
Treatment Totals		£355,311	£1,064,197	£2,431,653

Predicted Condition



The predicted condition chart shows that this option will lead to continued deterioration of the carriageways over time resulting in the percentage of carriageway in need of maintenance (red + amber condition) increasing from the current 56% to 63% in 20 years. The red condition will increase from 23% to 38%

Option C2 Summary

The option of a continuance of current funding levels using a preventative strategy is predicted to result in:

- ↘ deterioration of measured condition
- ↗ increasing quantities of defects
- ↗ potential for increase in 3rd party claims
- ↘ probable reduction in customer satisfaction as a result of increased pavement defects.

2.3.3 Option C3: Maintain Current Condition using a Preventative Strategy

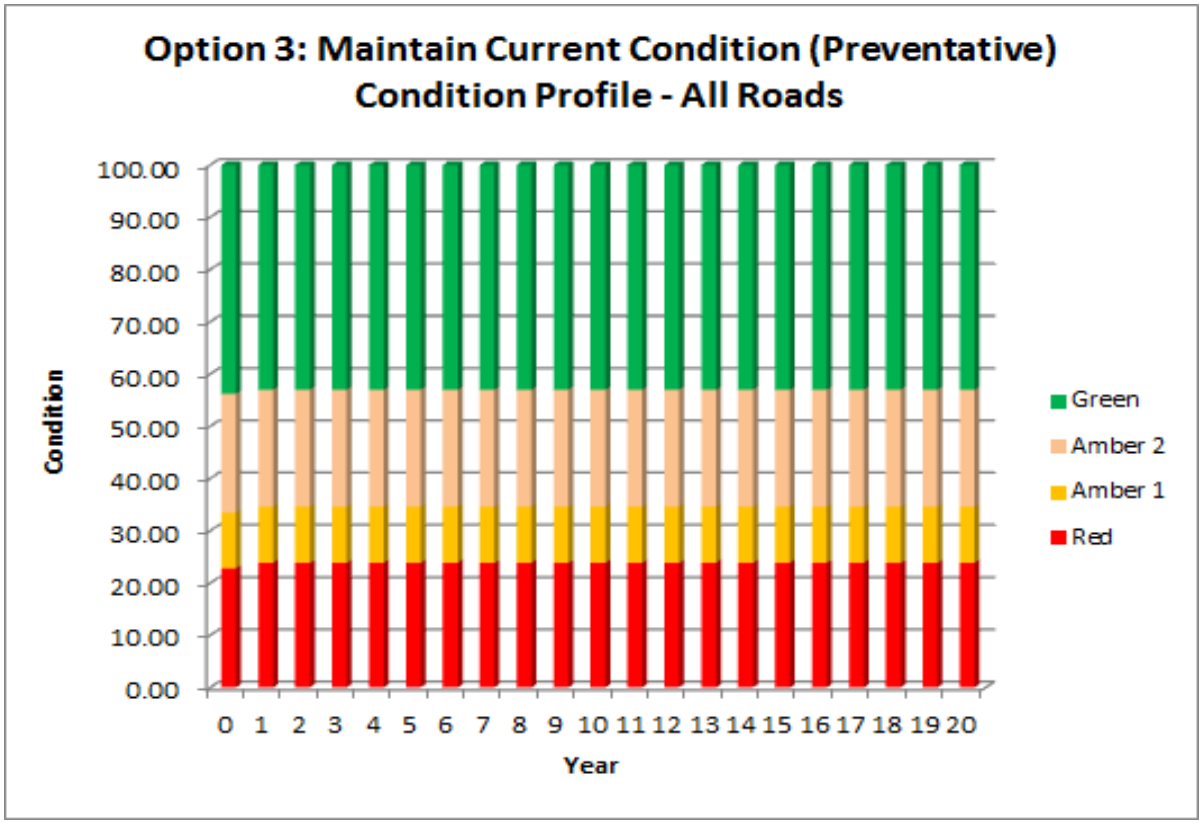
Budget

Investing a level of budget to maintain the current condition level. The maintenance strategy for this option will be preventative where current carriageway condition is always treated before deteriorating to the next level of condition.

The allocation between road type and treatment type is shown in the following table.

Option 3: Maintain Current Condition (Preventative)				
Annual Budget: £8,217,131				
Road Category	Urban / Rural	Strengthening Treatment	Resurfacing Treatment	Surface Treatment
Principal (A) Roads	Urban	£0	£29,409	£100,320
	Rural	£0	£254,420	£471,142
Classified (B) Roads	Urban	£0	£44,197	£127,898
	Rural	£0	£328,923	£462,323
Classified (C) Roads	Urban	£0	£97,045	£37,490
	Rural	£0	£3,003,662	£497,301
Unclassified Roads	Urban	£0	£273,546	£151,580
	Rural	£0	£1,889,217	£448,659
Treatment Totals		£0	£5,920,419	£2,296,712

Predicted Condition



This shows the condition of the carriageways remaining the same over time.

Option C3 Summary

The option of maintaining the current condition is predicted to result in:

- → continuation of measured condition
- → no increase in quantities of defects
- → lower potential for an increase in level of successful 3rd party claims
- → no probable change in customer satisfaction (assuming no increase in customer expectation)

2.3.4 Option C4: Invest Option 3 Budget using PCC's Current Strategy

Budget

The fourth option comprises investing the Option 3 'steady state' budget, using the current Powys County Council strategy which is described in Option 1.

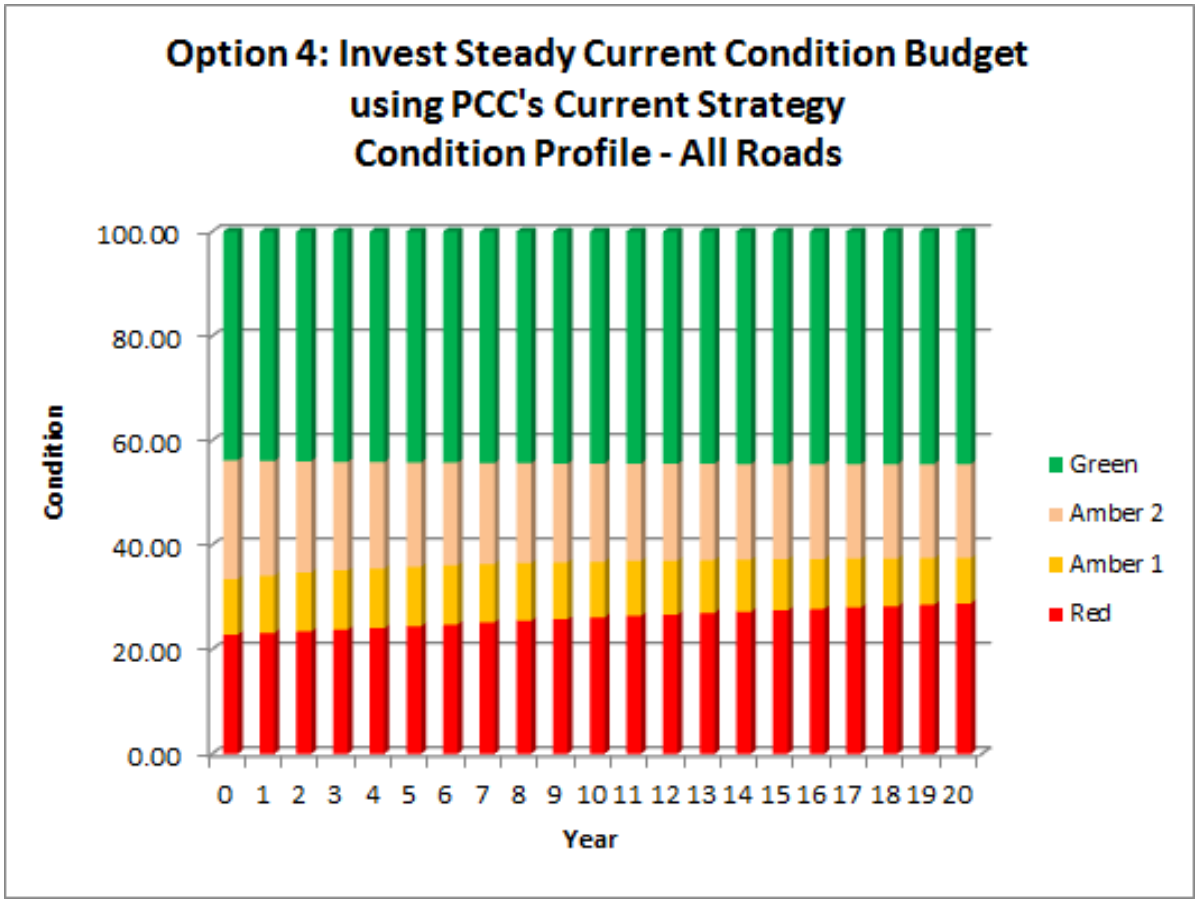
These increased budgets on several of the road types are greater than needed over a 20 year period causing a 'surplus' in the model. In the analysis when this situation occurred the 'surplus' budget was transferred as follows:

i. to the other road type ie. urban or rural within the road category eg. if surplus occurs in A Road Urban it is transferred to A Road Rural.
ii. to C Road Rural.

The allocation between road type and treatment type is shown in the following table.

Option 4: Invest Option 3 Budget using PCC's Current Strategy				
Annual Budget: £8,217,131				
Road Category	Urban / Rural	Strengthening Treatment	Resurfacing Treatment	Surface Treatment
Principal (A) Roads	Urban	£0	£44,689	£98,626
	Rural	£0	£301,698	£494,492
Classified (B) Roads	Urban	£0	£91,751	£117,287
	Rural	£0	£1,971,757	£131,287
Classified (C) Roads	Urban	£0	£62,988	£150,246
	Rural	£0	£2,324,277	£1,191,287
Unclassified Roads	Urban	£0	£470,567	£178,222
	Rural	£0	£463,671	£124,287
Treatment Totals		£0	£5,731,398	£2,485,733

Predicted Condition



The condition chart shows that this option will maintain the overall percentage of carriageway in need of maintenance (red + amber condition) at 56% over the 20 year period.

The level of red condition will rise from 23% to 29% over this period.

Option C4 Summary

The option of using the 'steady state' budget following PCC's current strategy is predicted to result in:

- ↘ continuation of measured red condition
- ↗ increasing quantities of defects
- ↗ potential for increase in 3rd party claims
- ↘ probable reduction in customer satisfaction as a result of increased pavement defects

2.3.5 Option C5: Based on outturn condition criteria as detailed below (£5.3m)

Budget

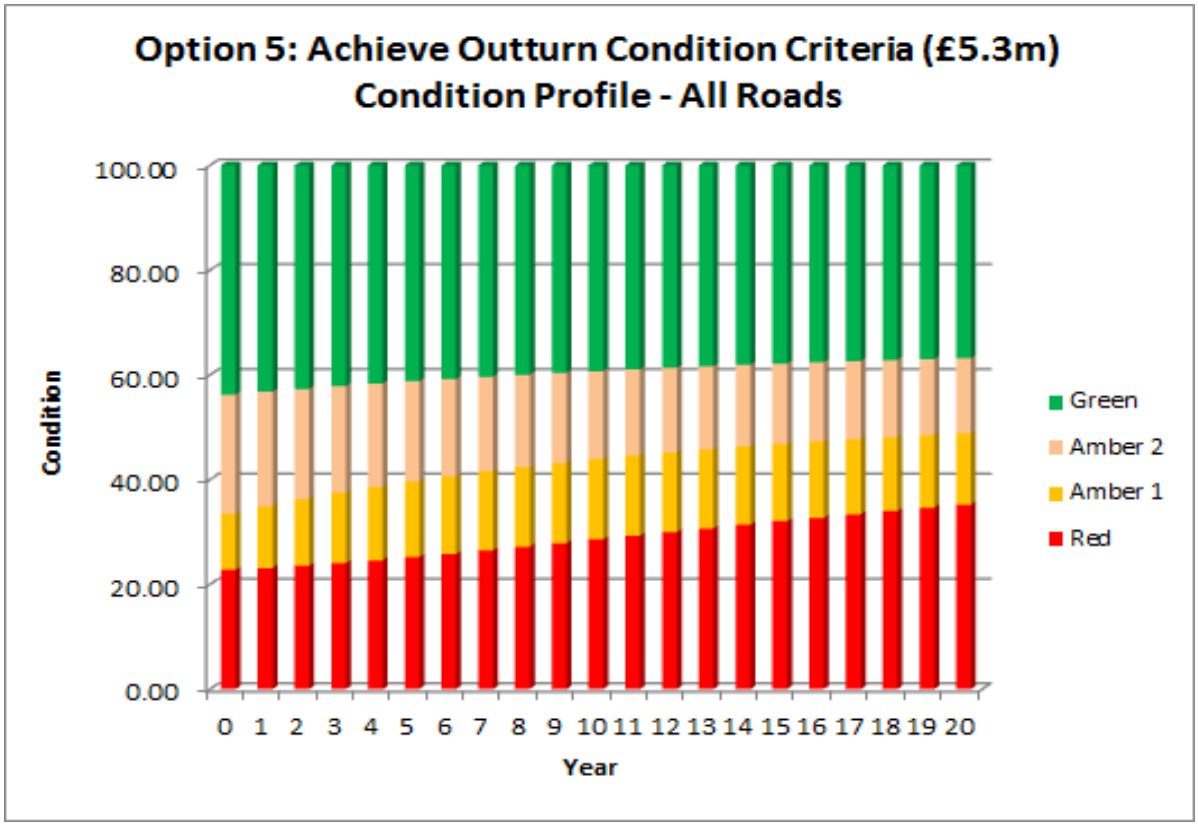
The fifth option investigates the budget required to meet the outturn condition criteria as specified resulting in an increased budget of £5.3m.

i. A Urban and B Urban – the % of red condition carriageway was allowed to deteriorate to 10% over the 20 year period.
ii. A Rural and B Rural – the % of red condition carriageway was allowed to deteriorate to 20% over the 20 year period.
iii. C Urban and U Urban – the % of red condition carriageway was allowed to deteriorate to 30% over the 20 year period.
iv. C Rural and U Rural – the % of red condition carriageway was allowed to deteriorate to 40% over the 20 year period.

The allocation between road type and treatment type is shown in the following table.

Option 5: Achieve Outturn Condition Criteria (£5.3m)				
Annual Budget: £5,292,191				
Road Category	Urban / Rural	Strengthening Treatment	Resurfacing Treatment	Surface Treatment
Principal (A) Roads	Urban	£0	£25,300	£75,900
	Rural	£0	£97,400	£292,200
Classified (B) Roads	Urban	£0	£34,500	£103,500
	Rural	£0	£91,000	£273,000
Classified (C) Roads	Urban	£0	£126,600	£37,490
	Rural	£0	£2,125,000	£497,301
Unclassified Roads	Urban	£51,000	£250,000	£100,000
	Rural	£0	£612,000	£500,000
Treatment Totals		£51,000	£3,361,800	£1,879,391

Predicted Condition



The condition chart shows that this option will lead to continued deterioration of the carriageways over time resulting in the percentage of carriageway in need of maintenance (red + amber condition) increasing from the current 56% to 63% in 20 years.

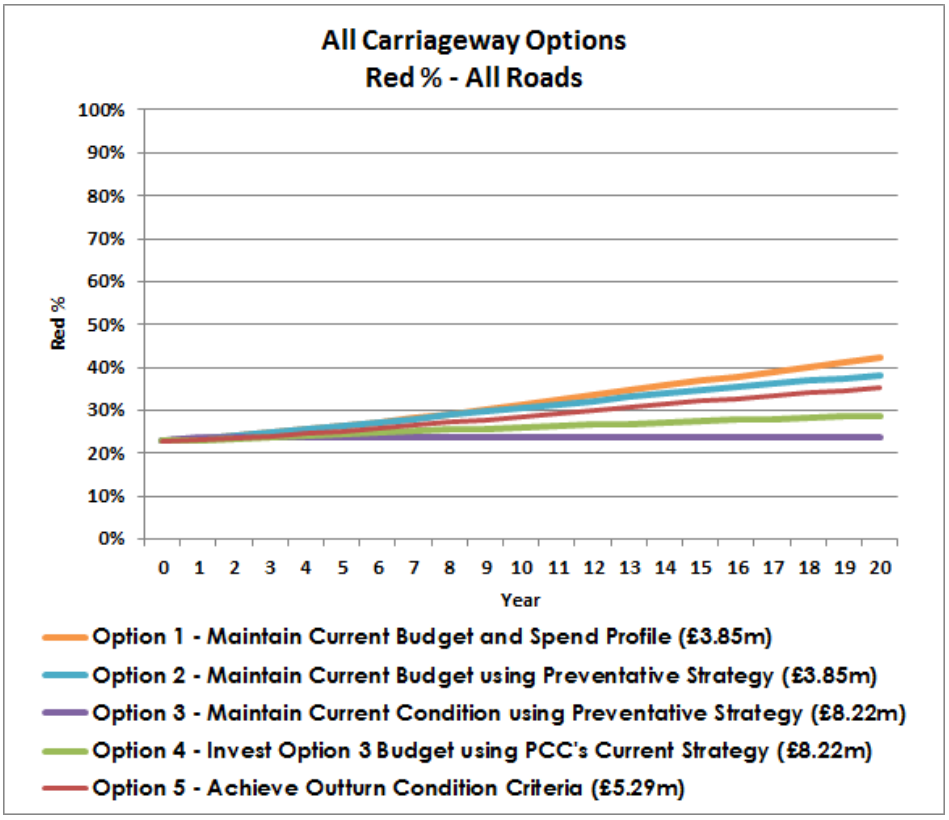
With the red condition increasing from 23% to 35%

Option C5 Summary

The option of achieving the outturn condition criteria as detailed above is predicted to result in:

- ↘ deterioration of measured condition
- ↗ increasing quantities of defects
- ↗ potential for increase in 3rd party claims
- ↘ probable reduction in customer satisfaction as a result of increased pavement defects.

2.3.6 Summary of Options



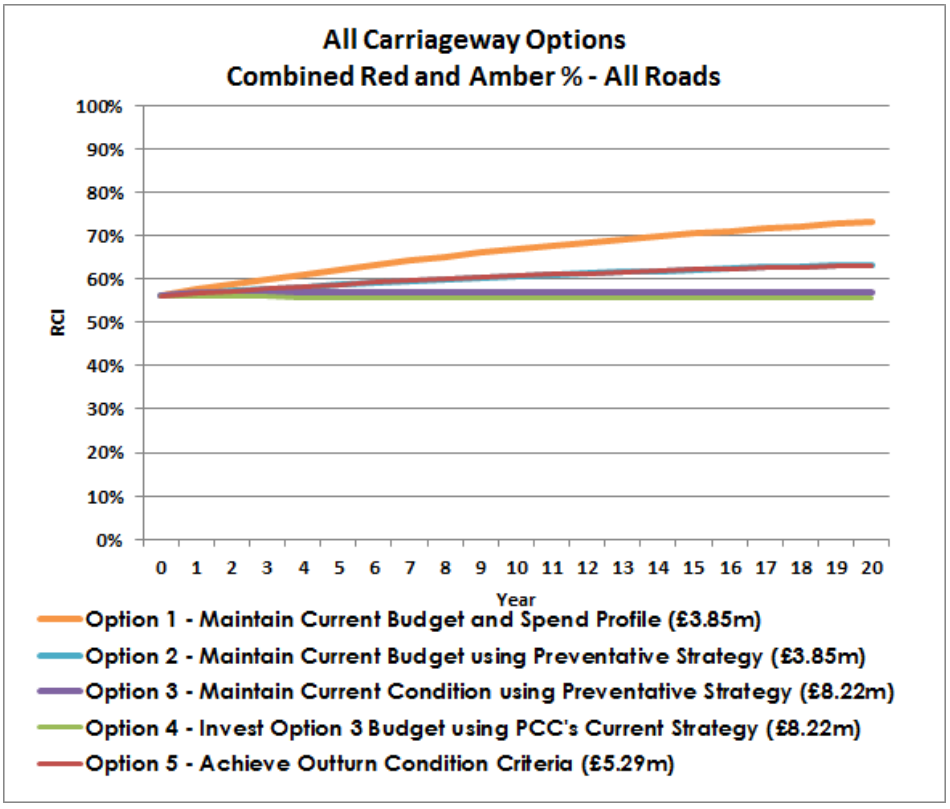


Chart Note: Options C2 and C5 produce broadly comparable results

Current Budget (Option C1 and C2)

Both options indicate that based upon this model the current funding level of £3.85m is not sufficient to maintain condition in the long term. i.e. ongoing deterioration is predicted.

The model predicted that after 20 years the Option C2 strategy of undertaking lower cost preventative treatments would have 10% less roads requiring maintenance and 4% less roads in a red condition than the current longer term resurfacing strategy (Option C1).

Steady State Budget (Option C3 and C4)

A preventative steady state budget which aims to maintain the current level of condition was calculated at £8.22m which is significantly higher than the current budget. Option C4 invests this same £8.22m using the current resurfacing strategy. The predicted results from the model show that after 20 years the quantity of carriageway in need of maintenance remains the same but the level of red condition increases by 7%.

Increased Red Condition Target Budget (Option C5)

The objective of Option C5 was to assess the costs of letting the current red proportions increase to service levels considered still acceptable. The steady state budget calculated in Option C3 is over twice the current budget and is therefore unlikely to be provided. The Option C5 budget of £5.2m is 35% higher than the current budget. It is predicted with this level of funding that the overall red % would only increase by 12% compared to 19% with the current investment.

In the long term there may be benefit in adopting a greater focus on preventative, early intervention treatments. These lower cost treatment would prevent roads deteriorating into a bad condition and thus would be beneficial in terms of minimising defect requiring reactive repair and reducing the average cost of treatment for resurfacing /renewal.

Applying such a strategy to existing funding levels however is predicted to have only a nominal effect due to the low level of funding being put into planned works (resurfacing etc).

3 Footways

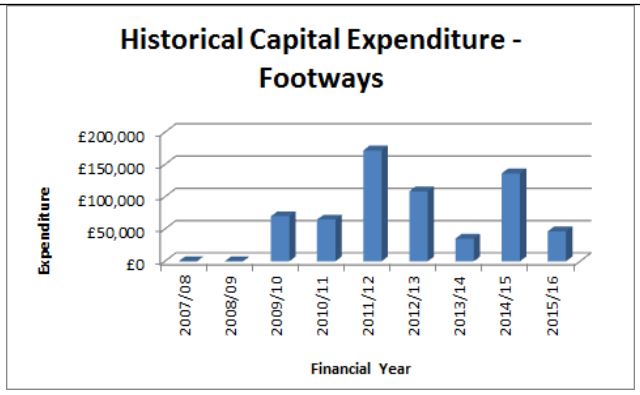
3.1 Key Issues

1. There is no inventory
2. There is no condition data
3. All costs associated with footways are recorded in carriageway budget codes so there is no knowledge of what level of service is currently provided.
4. The current planned maintenance return periods for footways is 318 years based on estimated inventory and condition.

3.2 Status Report

Asset Group: Footways

	Statistics	Commentary
The Asset	Footway / Cycleway Quantities Type: Footways — Length (m): 581,120 — Width (m): 2.00 — Total (m^2): 1,162,240 Type: Cycleways — Length (m): 10,606 — Width (m): 2.00 — Total (m^2): 21,212	• Actual footway inventory is unknown. • The quantity of footway length has been estimated as 10% of the carriageway length for valuation purposes. (Whole of Government Accounts GRC only)
Customer Contacts	To be assessed	•
Condition	To be assessed	• Powys County Council have no footway condition data. • This information is a requirement for valuation purposes. In the most recent valuation no condition information was provided.
Category 1 Defects	To be assessed	•

Asset Group: Footways		
	Statistics	**Commentary**
Category 2 Defects	To be assessed	•
Historical Investment		• There is no consistent annual capital budget allocated to footways. The level of budget allocated depends on how the footway schemes priority score compares with the other assets. • All reactive costs are included in the carriageway historical expenditure chart. PCC fund all reactive works out of the same budget code and it is not possible to breakdown costs to specific assets.
Valuation	Gross Replacement Cost £118,345,000 Depreciated Replacement Cost £94,676,000 Annualised Depreciation Charge £592,000	• No actual or estimated condition information was inserted into the Valuation Toolkit for footways. The resulting depreciation value reflects that the surface layer is fully depreciated. • The annualised depreciation (AD) was £592k which represents the average amount by which the asset will depreciate in one year if there is no investment in renewal of the asset. These figures are speculative due to the absence of real inventory and condition data.

Asset Group: Footways	
	Commentary
Current Strategies	• Planned Maintenance Strategy – potential sites for treatment are identified during routine inspections and from ad-hoc service demand. A priority rating is allocated to each site using the PCC Matrix which incorporates factors for the level of defects and customer and member importance. Identified highway assets schemes (capital programme) are ranked together with the highest ranking schemes being considered for Planned Maintenance funding allocations. • Reactive Maintenance Strategy - objective is to repair defects within the appropriate response times which are currently 24 hours to make safe a Category One Defect and 28 days for full repair. Category 2 defects have response times ranging from 2 months to an expectation of 24 months depending on the response category assigned.
Current Status	As at 31 March 2016 ↗ increasing quantities of defects ↗ potential for increase in 3rd party claims ↘ probable reduction in customer satisfaction as a result of increased reactive repairs.

3.3 Footways Options

3.3.1 Planned Maintenance

The predictions included below have been created using a cost projection tool developed under the SCOTS.CSSW Highway Asset Management project. The projections are based upon assumed rates of deterioration for each material type. There is no inventory or condition data so the following assumptions have been made:

i. The inventory quantity is assumed to be 10% of the carriageway length
ii. The condition information is based on authorities who have undertaken condition surveys which have similar characteristics to Powys. The selected condition profile is as follows:

Condition 1	Condition 2	Condition 3	Condition 4
28%	52%	16%	4%

Note: Data is from other authorities with similar network to Powys

3.3.2 Option F1: Maintain Current Budget and Spend Profile

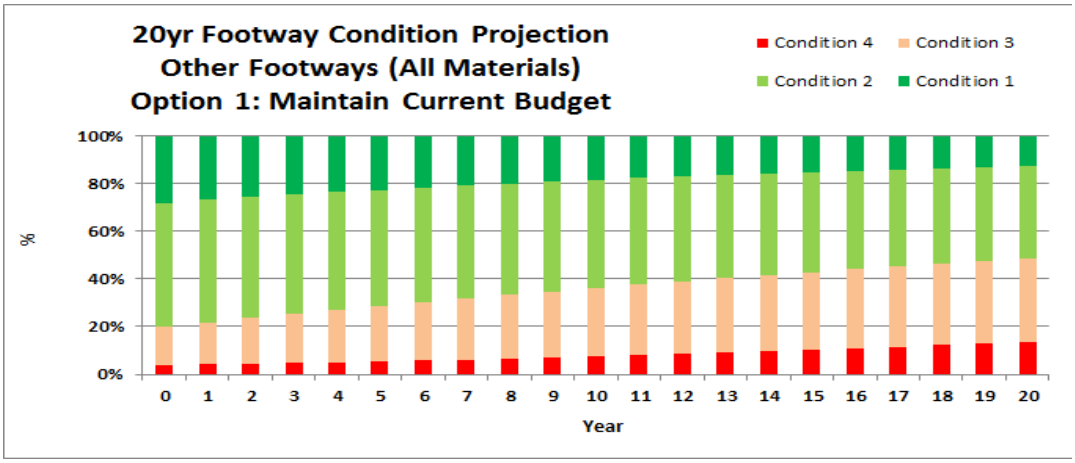
Budget

Continuance of current funding levels invested predominantly in resurfacing which is a longer life corrective treatment. This strategy targets the worst condition footways, Condition 4, aiming to eliminate lengths of footways where reactive defects have or are starting to appear.

The allocation of the budget is shown in the following table.

Option 1: Maintain Current Budget and Spend Profile (£46k)			
Annual Budget: £46,000			
Footway Material	Condition 2	Condition 3	Condition 4
Bituminous	£0	£0	£46,000
Treatment Totals	£0	£0	£46,000

Predicted Condition



The predicted condition chart shows that this option will lead to continued deterioration of the footways over time resulting in the percentage of footway in need of maintenance (Condition 3 & 4) increasing from the current 20% to 49% in 20 years. With the red condition increasing from 4% to 14%.

Option Summary

The baseline option of a continuance of current funding levels is predicted to result in:

- ↘ deterioration of measured condition
- ↗ increasing quantities of defects
- ↗ potential for increase in 3rd party claims
- ↘ probable reduction in customer satisfaction as a result of increased pavement defects.

3.3.3 Option F2: Maintain Current Condition using a Preventative Strategy

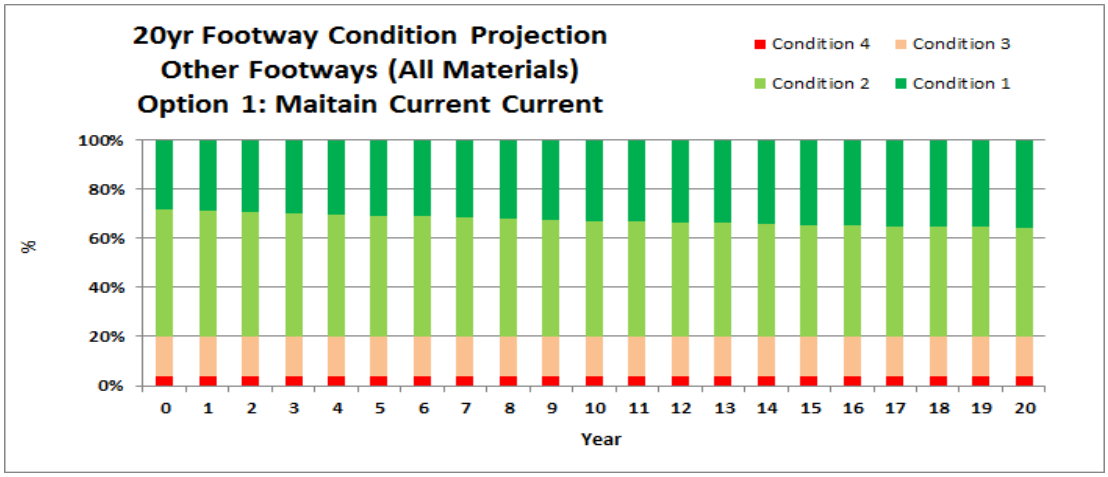
Budget

Investing a level of budget to maintain the current condition level. The maintenance strategy for this option will be preventative where current footway condition is always treated before deteriorating to the next level of condition.

The allocation of the budget is shown in the following table.

Option 2: Maintain Current Condition using a Preventative Strategy (£285k)			
Annual Budget: £46,000			
Footway Material	Condition 2	Condition 3	Condition 4
Bituminous	£60,000	£225,000	£0
Treatment Totals	£60,000	£225,000	£0

Predicted Condition



For this option Condition 3 and 4 footways would remain the same over time.

Note: it is not possible to model when footways change from condition 1 (as new) to condition 2 (aesthetically unpleasing). Therefore in this option they are not maintained at the same level over the 20 year analysis period.

Option Summary

The option of maintaining the current condition is predicted to result in:

- → continuation of measured condition
- → no increase in quantities of defects
- → lower potential for an increase in level of successful 3rd party claims
- → no probable change in customer satisfaction

Appendix

Carriageway Cost Projection Method

The model uses approximate local treatment rates to determine the amount of carriageway that can be renewed for given budgets. Budgets are split into 3 generic categories:

1. Strengthening: treatment of roads in the most deteriorated condition requiring a deep inlay/overlay or reconstruction (or a combination of these). These treatment address predominantly red condition
2. Resurfacing: treatment of roads where the surface is replaced either by inlay or overlay of the existing surface. These treatments address predominantly “deep amber” condition.
3. Surface Treatment: treatment of the surface of a road by the application of a thin surfacing on top of the existing surface. These treatment address predominantly “light amber” condition i.e. roads in the early stages of deterioration.

The use of these treatments allows options to consider not only the effect of different levels of funding but also the effect of differing uses of available funding.

The rates used by this model are shown below:

Road Type	Urban / Rural	Strengthening Unit Rate (£/m^2)	Resurfacing Unit Rate (£/m^2)	Surface Treatment Unit Rate (£/m^2)
Classified A Roads	Urban	£20.00	£20.00	£7.00
	Rural	£20.00	£20.00	£3.80
Classified B Roads	Urban	£20.00	£20.00	£7.00
	Rural	£20.00	£20.00	£3.40
Classified C Roads	Urban	£20.00	£20.00	£7.00
	Rural	£20.00	£20.00	£3.00
Unclassified Roads	Urban	£20.00	£20.00	£7.00
	Rural	£20.00	£20.00	£3.00

Footway Cost Projection Method

The model uses approximate local treatment rates to determine the amount of footway that can be renewed for given budgets. Each material type has an individual treatment allocated for each of the three condition categories (Condition 2, 3 and 4).

The use of these treatments allows options to consider not only the effect of different levels of funding but also the effect of differing uses of available funding.

The treatments and rates are shown in the following table:

	Condition 2		Condition 3		Condition 4	
Material Type	**Treatment**	**Unit Rate (£/m²)**	**Treatment**	**Unit Rate (£/m²)**	**Treatment**	**Unit Rate (£/m²)**
Bituminous	Slurry Seal	£5.00	Overlay	£20.00	Resurface	£20.00
PC Slabs	Relay PC Slabs	£20.00	Relay PC Slabs	£20.00	Replace PC Slabs	£20.00
Stone	Relay Stone	£20.00	Relay Stone	£20.00	Replace Stone	£20.00
Concrete	Replace Concrete	£20.00	Replace Concrete	£20.00	Replace Concrete	£20.00
PC Blocks	Relay PC Blocks	£20.00	Relay PC Blocks	£20.00	Replace PC Blocks	£20.00

PC = Pre-cast Concrete

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Annual Status & Options Report

Structures

2015/2016

Powys County Council

W o r k I n g D o c u m e n t

1. Introduction

This report presents a summary of the council's structures assets as at March 2016. The report complements the Highway Asset Management Plan (HAMP). It provides information to enable choices about future levels of investment in the structures asset.

1.1. Status

The status of the structures asset is reported in terms of condition, the outputs delivered, the standards achieved and an indication of customer satisfaction where information is available.

1.2. Options

The report considers the following options:

- A continuance of current funding levels;
- The predicted cost of maintaining current standards;
- Predicted effect of specified budget changes.

1.3. Long Term Forecasts

Structures assets deteriorate slowly, typically having a design life of 120 years. The impact of a level of investment cannot be fully understood solely by looking at the predicted impact over the short term. The methods of predicting the deterioration are not well developed enough yet. The report therefore includes some initial assessment of long term funding needs by means of providing comparison with the options for future investment.

1.4. Impacts Risk

It may not be possible to provide budgets capable of delivering an ideal service standard and some compromises may need to be made. To aid these decisions each option presented is accompanied by an assessment of its impact and the associated risks.

2. Status

2.1. The Asset

The authority's Structures asset comprises:

Asset	Number
Bridges & Culverts	1,697
Footbridges	75
Retaining Walls	254
Cattle Grids	289

2.1.1. Data Quality

Confidence is high with regard to the quality of records for bridges, culverts, footbridges and cattle grids.

Confidence is moderate with regard to retaining walls.

2.2. Structure Condition

2.2.1. Assessments

A programme to assess the condition of bridges for carrying vehicles operating at 40/44 tonnes commenced in the late 1980's.

The programme is 79% complete with a failure rate to date of 36%. Currently 62 structures that failed assessment are awaiting attention. Assuming the same failure rate a further 78 bridges would require some form of work. The total projected cost for bringing all 140 bridges up to 40/44 tonne capacity is £34 million.

Details of the assessment programme are given in the table below:

	Powys	
Total including Network Rail, British Rail Property Board, MOD & Canal and River Trust requiring assessment[See Note 1 below]	1,042	
Total Number of Assessments Completed	824	
Total Number of Assessments Remaining	218	A
% Assessments Completed	79%	
Number of Passes	528	
Number of Failures	296	B
% Failure of Assessments Completed	36%	C
Number of Bridges Strengthened	234	D
Total Cost of Strengthening (known costs)	£12,082,816	
Number of Bridges Currently Weight Limited	48	
Total Estimated Cost of Strengthening Weight Limited Bridges	£11,656,000	
Average Estimated Cost per Bridge	£242,833	E
Number of Bridges with Substandard Parapets	221	
Number of Bridges subject to Scour	100	
Number of failures already assessed but awaiting attention	62	F = B - D
Potential number of failures from assessments to be completed	78	G = A x C
Number of Bridges potentially failing assessment and requiring work	140	H = F + G
Total Estimated Cost of Strengthening Failed Bridges	£34,072,110[2]	J = E x H

Note 1 – this relates to structures requiring assessment. Total number of bridges PCC responsible for = 1,605. Total number of bridges on road network including Network Rail, British Rail Property Board, MOD & Canal and River Trust = 1,701.

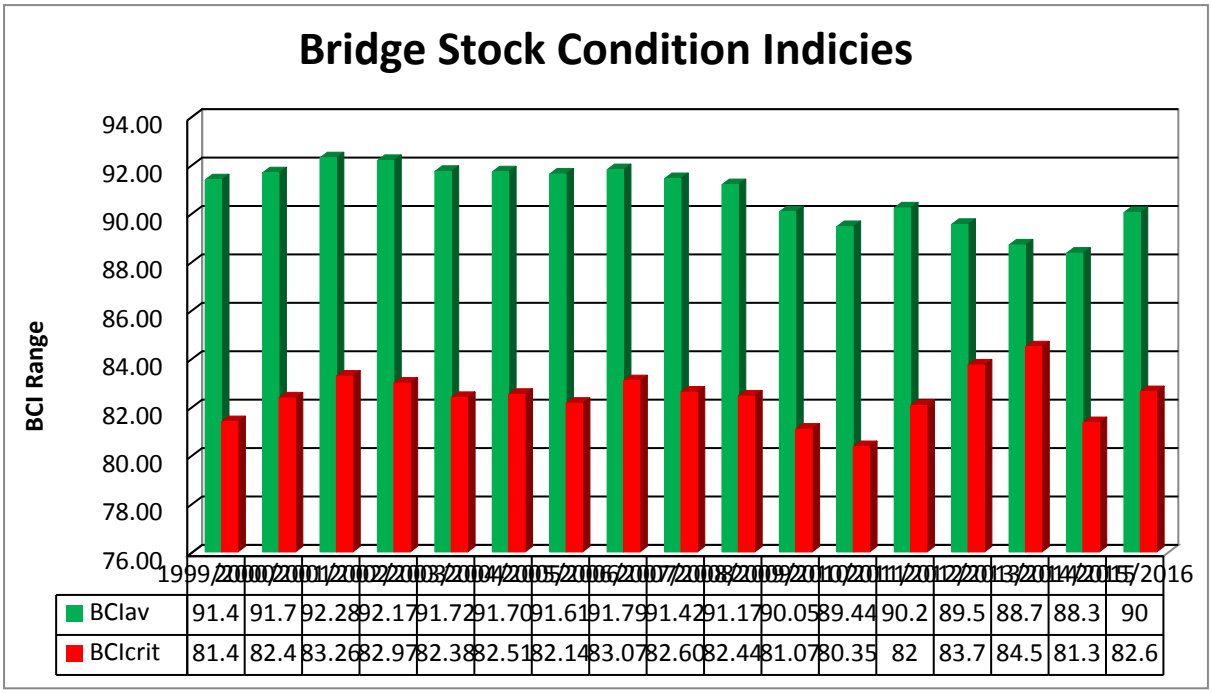
Note [2] – A number of these bridges may not require strengthening because they are deemed suitable to operate at a lower weight.

2.2.2. Bridge Stock Indicator (BCI)

The Bridge Condition Index for a structure is derived from the inspection of a structure which grades each component on the structure. Each of these components is weighted in terms of importance. The results are calculated to produce an index rating between 0 and 100 that gives an overall condition for a structure, 100 being the best. A further calculation is also undertaken that summates all the individual structures indexes into two overall Bridge Stock Condition Indexes (BSCI), namely, a BCI average (BCI_{AV}) and BCI critical (BCI_{CRIT}). The average figure summates all the individual components whereas the critical score looks at the specific components vital for the integrity of the structure. These scores give an indication of the overall health of the bridge stock and are used as KPI's which are compared with other authorities.

BCI Condition Performance Indicator Range	
Category	**Range**
Very Poor	0 – 40
Poor	40 – 65
Fair	65 – 80
Good	80 – 90
Very Good	90 – 100

The bridge condition indicator scores for the structures stock computed using inspection results up to and including 2015/16 are:

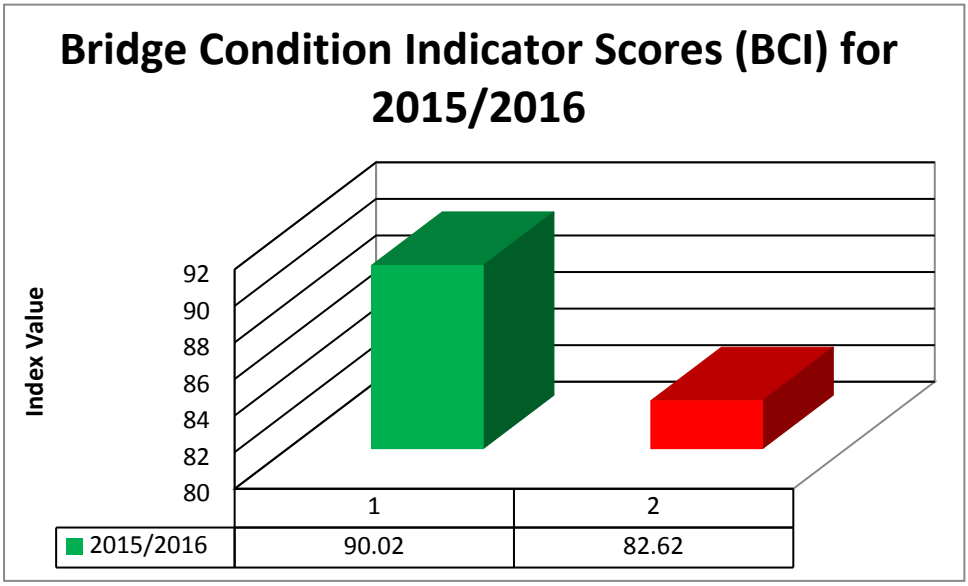


BSCIave: The bridge stock condition indicator (ave) is the numerical value of a bridge stock evaluated as an average of the bridge condition indicator values weighted by the deck area of each bridge.

BSCIcrit: The bridge stock indictor (crit) is the numerical value of the critical condition index for the bridge stock evaluated using the BCIcrit values for each bridge.

The results over the last 17 years clearly show deterioration in the bridge stock, not only in the average score but also a marked deterioration in the critical elements. This is a worrying trend as it demonstrates that maintenance budgets have not been sufficient to counter the inflation and construction services increases thus decreasing the amount of works that can be undertaken.

At the end of the 2015/2016 financial year the Bridge Stock Condition Indices were calculated as follows;



This shows the average condition of the bridge stock was 'Good'. However, when the critical components are taken in isolation the overall condition of the bridge stock is reduced to 'Fair'.

2.2.3. Scour

Scour represents one of the greatest risks to the integrity of a structure which can lead to catastrophic failure if not identified and addressed. A new technical memorandum has been published to guide structure owners in the assessment of the risk associated with scour effects.

The Authority over the next three years will undertake a level one assessment of its relevant structures to identify those at most risk from scour. This work will be undertaken in conjunction with the general inspection regime.

2.2.4. Substandard Parapets

The Authority is in the early stages of establishing a programme to undertake a risk assessment of the structure stock to establish those structures which have parapets that do not comply with current design requirements. For those structures that do

not comply the risk will be managed according to the nature of the road, its location and obstacle crossed and may not result in the need for replacement.

2.3. Performance

Overall it is considered that the structure stock is fit for purpose and safe to use.

2.4. Customer Satisfaction

There is currently no data to establish the level of customer satisfaction in relation to structures.

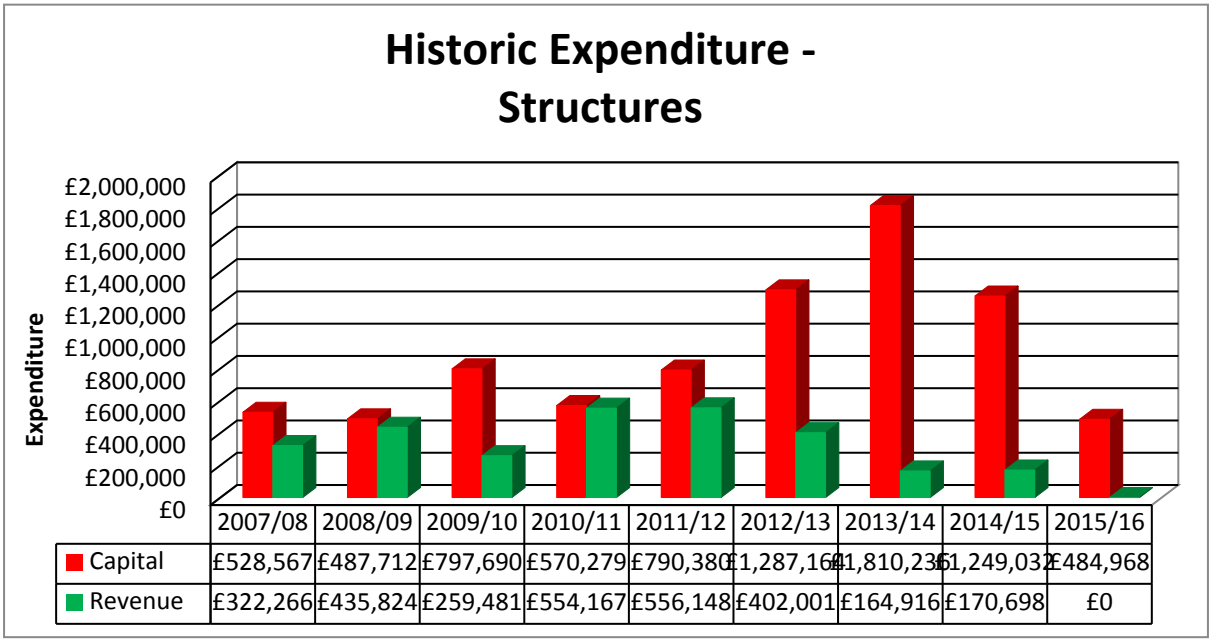
2.5. Financial Information

2.5.1. Asset Value

Structures Asset Valuation		
Asset Valuation	**Description**	**2015/2016 Cost**
Gross Replacement Cost (GRC)	Estimate of the current cost of replacing an asset using a standardised procedure.	£277,565,000
Depreciated Replacement Cost (DRC)	Estimate of the current value of the asset reflecting the condition of the asset within its lifespan.	£266,214,000
Annualised Depreciation (AD)	Cost of the asset to a single year of the assets expected lifespan.	£11,341,000

2.5.2. Historical Investment in Structures

Historical investment in Structures has been as shown in the table below:



	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Capital	£528,567	£487,712	£797,690	£570,279	£790,380	£1,287,164	£1,810,236	£1,249,032	£484,968
Revenue	£322,266	£435,824	£259,481	£554,167	£556,148	£402,001	£164,916	£170,698	£0

2.5.3. Output

In 2015/2016 the budgets allocated to structures works were able to provide the following output;

Structures Output		
Category	**Budget**	**Output**
Capital – Structures Strengthening (Core)	£150,000	
Capital – Planned Maintenance (Core)	£178,000	23 structures
Revenue – Routine & Planned Works	£379,166	13 structures, 8 new schemes completed, 5 completions from previous year.

3. Options

The areas identified for investment are presented below:

3.1. Strengthening

The strengthening of structures that do not meet their full load carrying capacity and are currently being managed either via the imposition of a weight restriction and/or a regime of special monitoring/inspections.

3.2. Refurbishment

Works required to refurbish structures that have deteriorated to a state whereby action is warranted to prevent further more serious deterioration.

3.3. Parapet Works

Works required to structures with substandard parapets on structures where their replacement would be appropriate.

3.4. Scour Protection

Works required to structures to protect them from the effects of river erosion that will undermine the integrity of the structure.

3.5. Preferred Option

The various areas for investment relate mainly to programming the required works over time. The choice between which area should receive attention first therefore needs to relate to the priority which the council wants to achieve the predicted outcome from each area of investment.

It should be noted that all the structures will continue to deteriorate over time and it is likely that some structures will be identified that required treatment, possibly in advance of those already identified requiring works. An annual review of the programme and subsequent reporting will show if the overall need changes.

For the next few years budgets will be targeted at

3.6. Budget

It is expected that the current level of funding will continue as shown below until at least 2015/16;

Budget for Structures	
Category	**Budget**
Routine Cyclic Maintenance	£150,000
Planned Maintenance	£125,000
Inspections and Assessments	£100,000
Capital Works - Core	£375,000
Total	£750,000

3.7. Option Summary

If the current levels of funding continue then this is predicted to result in;

- The requirement for the revenue budget to grow over time to accommodate increasing reactive repairs
- A reduction (deterioration) of measured condition
- Increasing quantities of minor defects
- Likelihood of decreased customer satisfaction as a result of increasing repairs

4. Long Term Forecasts

4.1. Prioritisation of Overall Funding Needs

Capital budgets will be targeted at addressing the strengthening of the substandard structures to either remove or prevent weight restrictions. In addition, structures in need of major refurbishment works, which are usually heritage structures, will also be included in the forward capital programme.

The revenue budgets will continue to be used to undertake cyclic routine maintenance together with planned maintenance works on specific elements of those structures identified as needing high priority works through the inspection regime.

4.2. Overall Funding Need

Currently, the estimated cost of strengthening the identified substandard structures is in excess of £7 million. However, the Authority still has over 300 bridges to structurally assess which if the current failure rate of 34% continues will add in excess of 100 further structures to the programme.

The backlog of maintenance works identified through the inspection process is in excess of £7 million, which is in addition to the strengthening costs.

5. Impacts Risk

If funding levels are not increased in the future then the structure stock will continue to deteriorate. Even if the current level of budget is maintained structures will still deteriorate as can be seen from the BCI figures detailed above.

This is likely to lead to increases in costs to rectify defects as they become worse and could eventually lead to structures becoming unsafe or unserviceable and their use having to be constrained or removed.

SCOTS / CSSW

ASSET MANAGEMENT PLANNING

RAMP/HAMP #2

Highway Maintenance Manual

Powys County Council

Working Document

Document Information

Title	SCOTS/CSSW Asset Management Planning RAMP/HAMP #2 5. Highway Maintenance Manual
Owner	Highways Transport & Recycling – Head of Service
Description	This document records how Powys County Council maintain the council's highway network. It provides a reference for those who are employed to manage the highway asset. It records procedures covering all aspects of highway maintenance including inspection policies which may be relied upon by the council when defending 3rd party claims.

Document History

Version	Status	Date	Author	Changes from Previous Version
1.0	Draft	June 2014	exp consulting	Not applicable

Document Control

Version	Status	Date	Powys County Council Approval
			Enter date of council approval /relevant committee…

Contents

1 Introduction

1.1 Purpose

This manual records how Powys County Council (PCC) manages and maintains the council's highway assets.

Separate sections are provided for carriageways, footways, street lighting, structures, traffic management systems and street furniture. The grouping match those required for financial reporting under the CIPFA Transport Infrastructure Code.

1.2 Use

This manual is a reference for use by those who manage the highway asset. The document is a controlled document. A register of those to whom it has been issued is included in front inside cover of the document.

1.3 Highway Asset Management Planning (Section 2)

The manual is an important part of the council's application of good highway asset management planning practices. The councils approach is outlined in section 2 of this document.

1.4 Highway Maintenance Procedures (Section 3)

The manual covers carriageways, footways, street lighting, structures, traffic management systems and street furniture. For each asset group details are given as to how the council:

- Inspects
- Categorises and prioritises reactive repairs
- Assesses condition
- Identifies and prioritises sites or assets for replacement, renewal or strengthening
- Chooses the materials used
- Prepares works programmes
- Procures and manages works
- Records and reports costs
- Records and responds to customer contacts

The details are included in section 3 of this document

1.5 Review and Updating

This document is reviewed and updated annually. The next update is due in May 2017.

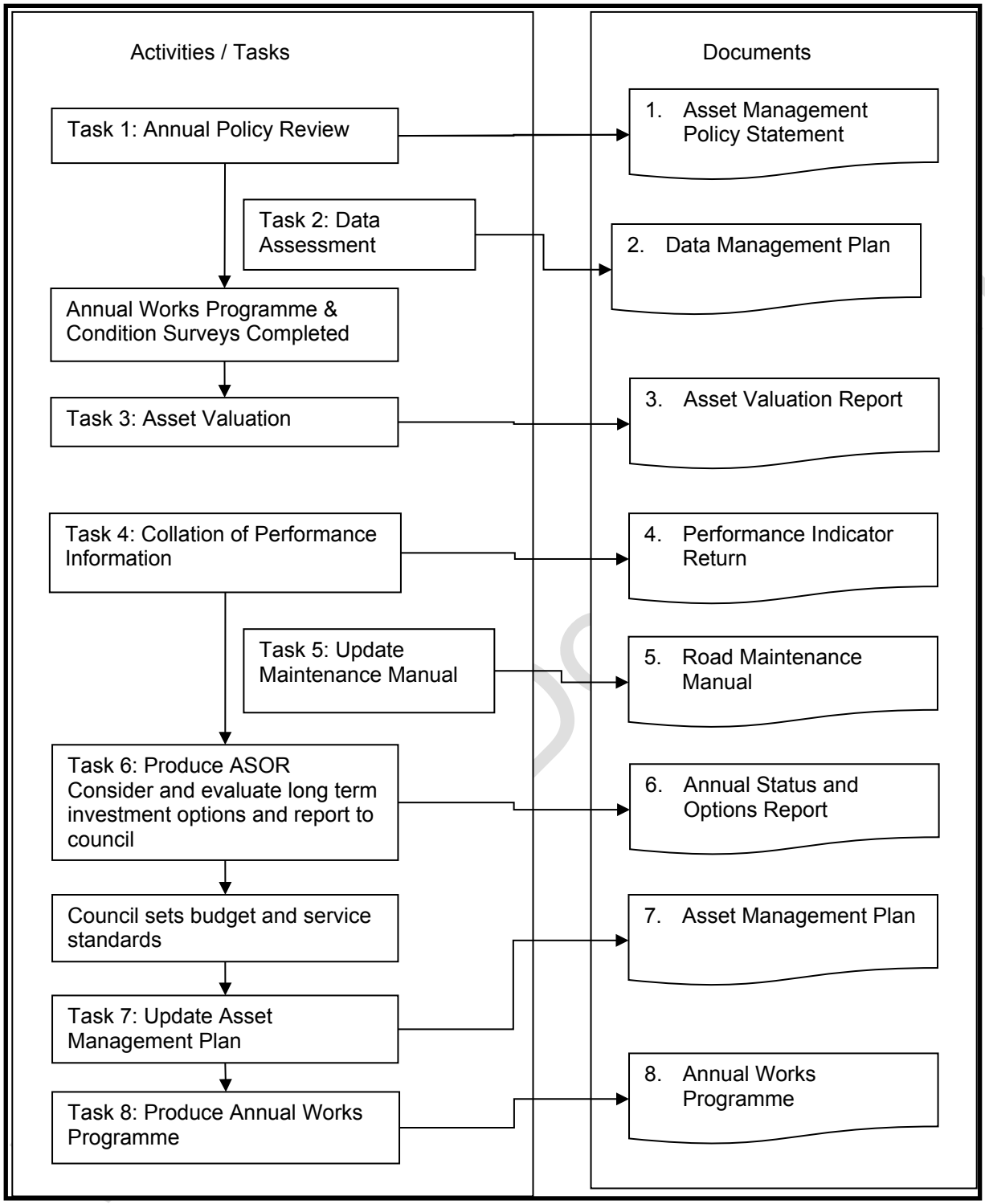
2 Highway Asset Management Planning

2.1 Introduction

This section summarises PCCs highways asset management planning practices. It details the tasks that are required and provides details of the documents, spreadsheets and template documents that are to be used.

2.2 Annual Asset Management Planning Process

The process below shows the steps that PCC uses to apply asset management planning. The documents that support this process are identified. The content of each document is described below.



2.3 Highway Asset Management Planning Documentation

PCC produces and updates the following asset management documentation

1. Asset Management Policy Statement

The Highway Asset Management Policy Statement formally confirms the council's commitment to applying asset management systems to manage highway assets, publishing an Asset Management Plan and reporting achievements and performance annually.

- The **PCC Highway Asset Management Planning Policy Statement** is stored at (hyperlink))

2. Data Management Plan

The Data Management Plan records how the council manages relevant asset data, specifically: what data is held by the council about its highway assets, what methods used to maintain this data and what Plans there are for improvement of the data held

- The **PCC Highway Asset Data Management Plan** is stored at (hyperlink)

3. Highway Asset Valuation Report

The Highway Asset Valuation Report details the results of the latest highway asset valuation. It provides a reference to support the figures that the council is required to submit annual for whole of government accounts and will assist with any financial audit of the valuation. It records the quality of the data used to produce the valuation, the method of calculation and the sources of data.

The report comment on the results, allows council finance people to understand what the valuation tells the council about the road asset and record any limitations with the current valuation. It should recommend improvements that would enable more reliable future valuations.

- PCC **Annual Highway Asset Valuation Reports and Spreadsheets** are stored at (hyperlink)

4. Performance Indicator Return

The performance indicator report is produced in the form of a spreadsheet managed by APSE. It provides results which are required to be included in the Annual Status and Options Report and enables PCC to compare performance and undertake cost benchmarking against similar authorities.

- The current (and previous) **PCC Annual Highway Asset Performance** results are held (hyperlink)

5. Maintenance Manual

This Highway Maintenance Manual records the methods used to manage the highway assets

6. Annual Status and Options Report (ASOR)

The Annual Status and Options Report (ASOR) summarises the status of each asset group in terms of its condition, compliance with meeting repair standards, level of public complaint/contact etc. The report describes the result of the previous year's investment in terms of meeting the target service standards. The status report enables council to note if the standards in the HAMP are being met or not. Based upon the current status the report set out the options available to the council for the future. This include long term (20yr)

predictions of levels of defects and condition and other relevant data sufficient to enable the council to choose how to best allocate the following years budgets and to decide whether any of the service standards contained in this HAMP need to be revised. Specific investment strategy options are presented for the major asset groups of carriageways, footways, structures, street lighting, drainage and traffic signals. Each option defines target service standards and their predicted cost and how they could be delivered. In particular they address the types of works that are planned and state the approach to be taken for example if a "prevention is better than cure" approach has been adopted.

– **The Annual Status and Options Reports** are stored at (hyperlink)

7. Highway Asset Management Plan (HAMP)

The Highway Asset Management Plan (HAMP) records the service standards that the council is aiming to deliver for each asset group. These standards are based upon detailed predicted budget levels in the short term (3yrs) and general budget level predictions over the longer term (20yrs). The plan identifies risks that may prevent the plan being realised. The plan reflects local traffic levels, customer preferences and the council's corporate strategies.

– **The PCC HAMP is stored at** (hyperlink)

8. Annual Programme (Rolling Programme)

The planning process results in identified schemes, roads to be surfaced, bridges to be strengthened, streets where lighting it so be changed etc. A 3 year rolling programme of schemes is maintained conjunction with the HAMP. The methods of prioritisation of schemes are included in the relevant sections of this maintenance manual (this document)

Annual Updating Regime

It the documents above are reviewed and updated annually. The programme for updating is shown below.

Powys County Council Highway Asset Management Plan – Annual Programme													
	Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Annual Policy Review	■											
2	Data Assessment		■	■									
3	Asset Valuation				■	■							
4	Collation of Performance Information						■	■					
5	Maintenance Manual Update							■	■				
6	Annual Status and Option Report									■	■		
7	Asset Management Plan Update											■	■
8	Works Programme	■											■

3 Financial Management

3.1 Sources of Funding

Revenue expenditure is recurring expenditure that is financed from current income (ie. not through borrowing). It consists of the day to day running costs of the highway including staff wages and salaries. The main source of revenue expenditure is the Welsh Assembly who provide an annual Grant which is based on complex formulas. The Council can also use funds provided by the Council Tax and generated income from charging for services such as parking.

Capital expenditure is spending which creates long term assets, whose benefits will last over a period of years such as spending on the purchase, construction or improvement of highway assets. Capital allocations are made by the Welsh Assembly taking into account factors such as road length, classification, traffic figures and road condition data. Other sources of funding include Government Grants by way of Emergency Capital Funding, for example, and Council Reserves.

3.2 Budget Allocation

3.2.1 Capital Allocation

The Capital Programme is developed using the following process:	
Step 1:	Candidate Schemes (minimum of £10,000) for the Powys County Council's (PCC's) Capital Programme are primarily identified by the Area Managers and Highway Supervisors and recorded in the 'Capital List' which is stored ??? and the responsibility of the Area Managers. The 'Capital List' includes schemes for all assets. Customers notify PCC with their candidates via the PCC Customer Contact Centre or their Local Member. These are passed onto the Highway Supervisors for assessment as described in Section 11: Customer Contact Centre.
Step 2:	All Candidate Schemes on the 'Capital List' are allocated a priority using the 'Capital Programme Prioritisation Matrix' by the Highway Supervisor. The same process is used for all assets. Documentation of the 'Capital Programme Prioritisation Matrix' is stored ???
Step 3:	In October??? the Highway Supervisor reviews the 'Capital List' identifying schemes in close proximity to each other which could be joined. The Highway Supervisor calculates a new priority for these schemes.
Step 4:	In November??? the Area Manager travels to all the sites on the 'Capital List' and assigns their own priority. The schemes on the Capital List are re ranked using the Area Manager's priorities.
Step 5:	The 'Capital Programme Budget' is announced by the PCC ???.
Step 6:	The Area Manager / Network Manager selects the highest ranked schemes on the Capital List until the Capital Programme Budget is fully utilised. This becomes the Draft Capital Programme. The Area Manager / Network Manager also records the top five ranked schemes not selected on a second list which could be undertaken if issues occurred with any of the approved schemes.
Step 7:	The Network Manager prepares a committee report requesting the approval of the Draft Capital Programme.
Step 8:	The Members approve the Capital Programme

Step 9:	The Finance Department set up the Finance Codes	
Step 10:	The Network Management Officer (NMO) and the Highways Grounds and Street Scene (HGSS) decide which schemes will be undertaken by the council and which schemes will be undertaken by external contractors.	
Step 11:	Scheme designs are completed.	
	Step 11A:	For schemes allocated to external contractors the Design Group prepare the contract and undertake the tendering process through to selecting the successful contractor.
	Step 11B	For schemes allocated to internal resources the Design Group provide the design only.
Step 12:	The works are completed	
Step 13:	The contractor completes the Maintenance Manual and the Health and Safety Documentation and provides to the NMO within 3 months	
Step 14:	The Designer completes the As Builts and provides them to the NMO.	
Step 15:	The NMO updates the inventory data in the appropriate asset database and links the As Built information.	

3.2.2 Revenue Allocation

The following process describes how the total revenue budget is allocated to individual areas and work categories.

The overall responsibility for this process is the Highways Grounds and Street Scene Manager.

The process requires input from the Area Managers.

The following process describes how the total revenue budget is allocated to individual areas and work categories.		
Step 1:	The Members approve a revenue budget for highways	
Step 2:	The Highways Grounds and Street Scene Manager (HGSSM) apportion the revenue budget to the fifteen operational areas which is based on inspection length (see Table below)	
Step 3:	The HGSSM apportion the revenue budget to the individual work categories (see Table below)	
Step 4:	The HGSSM sends the specific revenue budgets to the appropriate Area Manager to review.	
Step 5:	The HGSSM and Area Manager meet to discuss the revenue budgets	
	Step 5A:	If only minor changes are required between work categories and areas the HGSSM amends the revenue budgets and then publishes it as final.
	Step 5B:	If major changes are required between work categories and areas the HGSSM will hold a meeting with all Area Managers to discuss the allocation of the revenue budget.
	Step 5Bi:	The HGSSM and Area Managers agree on the breakdown of the revenue budget.
Step 6:	The Finance Department set up the Finance Codes	

Local Environment Area Breakdown		
Number	**Name**	**% of Revenue Budget**
Area 1		
Area 2		
Area 3		
Area 4		
Area 5		
Area 6		
Area 7		
Area 8		
Area 9		
Area 10		
Area 11		
Area 12		
Area 13		
Area 14		
Area 15		

Revenue Work Categories	
Revenue Category	**Responsibility**
Remedial Earthworks	Highways Grounds and Street Scene (HGSS)
Surface Dressing	HGSS
Safety & Minor Repairs (Reactive)	HGSS
Storm / Flood (Reactive)	HGSS
Patching & Minor Repairs (Reactive)	HGSS
Patching & Minor Repairs (Planned)	HGSS
Sweeping & Cleansing (Planned)	HGSS
Ditching & Grips	HGSS
Routine Jetting / Gully Emptying	HGSS
Traffic – carriageway markings	HGSS
Verge Maintenance	HGSS
Winter Maintenance Fixed Costs	HGSS
Winter Maintenance Rest Period	HGSS
Winter Maintenance Precautionary / Planned	HGSS

Revenue Work Categories	
Revenue Category	**Responsibility**
Winter Maintenance Reactive / Unplanned	HGSS
Safety Fencing & Barriers	HGSS
Traffic – signs illuminated	HGSS
Traffic – signs non-illuminated	HGSS
Street Lighting Energy	HGSS
Street Lighting Maintenance	HGSS
Bridge Inspection and Assessment	HGSS / Network Management Officer (NMO)
Bridge Structural Maintenance	HGSS / NMO
Cleaning of Bridge, Culverts, Subway	HGSS / NMO
Bridge & Culvert Structural Maintenance	HGSS / NMO
Retaining Walls & Cattle Grids	HGSS / NMO
Retaining Walls & Structures	HGSS / NMO
Traffic Energy	HGSS
Traffic Safety Maintenance	HGSS

3.3 Financial Cost Categories

The financial cost categories enable the council to group similar work types costs together. There are ten cost categories which are described below. Each financial transaction associated with highway maintenance should be allocated to one of the following cost categories.

Planned Maintenance - Preventative	Planned maintenance activities that are designed to ensure that more expensive future repairs may not be needed.
Planned Maintenance - Corrective	Planned maintenance activities that correct the condition of the asset and which would not cost significantly more if delayed.
Routine Cyclic Maintenance	Scheduled works consisting of activities that are based on a prescribed time interval.
Routine – Reactive Maintenance (Emergency)	Reactive repair of potentially dangerous defects identified from inspection or customer complaint / notification.
Routine - Reactive Maintenance (Non-Emergency)	Other less urgent minor repairs
Routine – Inspection and Survey	Cost of specialist inspection and surveys
Operating Costs	Costs of operating elements of the asset

Overhead	Internal costs associated with the management of the asset. NB it is accepted that these costs may not be available at an asset group level
Loss	Money expended that is effectively "lost" to the council from which no benefit to the asset or user is gained.
Improvements	Works that add new infrastructure to the asset.

4 Risk Management

Risk management is the process by which an organisation identifies risks, assesses their relative importance, determines the appropriate control mechanisms and ensures that the agreed action is taken.

Powys County Council manages all their risks using the 'Powys County Council Risk Management Framework, Date'. An electronic copy of this document can be found ???

The Highways Department maintain a Risk Register following the 'Powys County Council Risk Management Framework, Date'. An electronic copy of the Highway Departments Risk Register can be found ???

It is the responsibility of the Network Manager to ensure the Highway Departments Risk Register is kept up to date.

5 Procurement

Works on the highway asset are either undertaken internally by the Highways Ground and Street Scene Department or by external providers. The following table shows the providers and contract types for each asset.

Asset Procurement		
Asset	**Routine & Reactive Repairs**	**Planned Maintenance**
Carriageway	All completed by Highways Ground and Street Scene (HGSS)	Smaller length resurfacing (HGSS) Resurfacing – external Framework Framework – with other authorities Trunk Road Framework
Footways	All completed by HGSS	Reconstruction – Small – internal Large - external
Street Lighting	All completed by HGSS	Column (New / Replacement) – internal Luminaire (New / Replacement) – internal Structural Testing – external
Highway Structures	All completed by HGSS	Combination of Highways Ground and Street Scene and External Contractor (HGSS) First option is given to HGSS.
Traffic Signals	Some bulbs replaced by Internal External	External
Street Furniture	All completed by HGSS	
Weather Stations	Contract with Vaisala for the	External Provider (individual contract)

Asset Procurement		
Asset	**Routine & Reactive Repairs**	**Planned Maintenance**
	weather station provided by themselves.	

The Procurement Department are responsible for all procurements. They have their own set of processes which are not referred to in this document.

6 Programme Coordination

In Powys the 'Streetworks Team' of Powys County Council are responsible for managing the requirements of NSRWA.

6.1 Requirements for Highway Works

For all highway projects the following completed Notices need to be provided to the Streetworks Team

i. Section 54 – Advance notice of certain works

ii. Section 55 – Notice of starting date of works

iii. Section 74 – Actual Start

The following are responsible for completing the above notices for highway projects:

- The Design Department are responsible for completing the notices for highway projects that they design and manage
- Contractors are responsible for completing the notices on projects which do not require design.

6.2 Three Monthly Meetings

The 'Streetworks Team' hold 3 monthly meetings with utility operators and the council representatives

All resolutions are recorded and sent to all affected parties

7 Adoption

The full list of adopted roads is located on the Street Gazetteer. The Network Management Officer is currently designated as the Street Custodian for the Gazetteer.

In the event that Powys County Council decide to adopt new assets the following process is in place to ensure that both parties' rights are attained. The main objective of the 'adoption process' in highway maintenance terms is to ensure that the 'adopted' asset meets a certain level of condition before the council takes ownership. All maintenance needs will come out of the highway maintenance budget once ownership is transferred.

It is also important to obtain the asset inventory and insert it into the appropriate asset management system.

The following process describes how non council assets become the responsibility of Powys County Council.

Who is responsible for managing this process?

Adoption Process
This process describes how non council assets become the responsibility of Powys County Council.

Step 1:
Step 2:
Step 3
Step 4:
Step 5:
Step 6:
Step 7:
Step 8:
Step 9:

8 Third Party Claims

Customers who believe the highway asset has caused damage to their personal possessions or to themselves may make a claim against PCC. PCC takes this very seriously and have a robust process in place to ensure that there are minimal successful claims.

The full third party claim process is managed by the Third Party Claims Officer (TPCO).

All members of the public contacting PCC to claim for damages or personal injury caused by the Council assets will be directed to the TPCO. The most common methods of contacting the council are through the PCC Contact Centre or the Highways Grounds and Street Scene (HGSS) Department.

The HGSS Department will be specifically requested by the TPCO to collect specific information. This is initiated by the TPCO sending an information request to the Highway Supervisor.

The Highway Supervisor will undertake a site inspection, gather the required information and return to the TPCO.

The TPCO will contact the Highway Supervisor on receipt of the information to confirm their understanding and request further information if required.

9 Reclaims

PCC strive to reclaim costs for damage to assets from parties involved in Road Traffic Collisions (RTCs). These are mainly reported to PCC by the Police, members of the public and highway operatives.

The full third party reclaim process is managed by the Finance Department.

The HGSS's roles are:

i. to attend the site and obtain photographs and details of the damage which needs to be repaired. This is provided to the Finance Department using the 'Reclaim Information' form which is located on the PCC Server.

ii. Complete the work to repair the damage and charge to a 'recharge number' which is specifically set up in the Finance System for this work. The Finance Department are responsible for setting up the 'recharge number' and informing HGSS.

iii. Provide the specific invoice information to the Finance Department to be used as evidence of costs.

10 Safety Inspection

Safety inspections are undertaken to meet the key objective of Network Safety and they form a key aspect of the authority's strategy for managing liabilities and risks. They are used to identify defects likely to be hazardous or cause serious inconvenience to users of the highway network or the communities served, including defects requiring urgent attention.

All carriageways, footways and cycleways are inspected at different frequencies depending upon the allocated hierarchy. The full list of frequencies are shown in the following sections.

10.1 Frequency of Safety Inspections

10.1.1 Carriageway Inspection Frequency

The following frequency for safety inspections is in place in Powys.

Carriageway Inspection Frequency					
Category	**Hierarchy Description**	**Type of Road General Description**	**Inspection Frequency**		**Code of Practice**
			Urban	**Rural**	**All Roads**
2	Strategic Route	Principal 'A' Roads between primary destinations.	28 days	28 days	Monthly
3a	Main Distributor	Major urban network and inter-urban primary links. Short-medium distance traffic.	28 days	28 days	Monthly
3b	Secondary Distributor	Classified Road (B & C) and unclassified urban bus routes.	28 days	28 days	Monthly
4a	Local Roads	Local interconnecting roads.	3 months*	3 months*	3 Monthly
4b	Local Access Roads	Access roads to limited number of properties.	6 months*	6 months*	12 Monthly
5	Recreational & Agricultural	Rural unsurfaced ways with a public vehicular right of way.	As required	As required	12 Monthly

* Inspection frequency also depends on location.

10.1.2 Footway Inspection Frequency

The following frequency for safety inspections is in place in Powys.

Footway Inspection Frequency				
Category	**Hierarchy Description**	**Type of Footway/Cycleway General Description**	**Inspection Frequency**	**Code of Practice**
1(a)	Prestige Area	Very busy areas of towns with high public space and streetscene contribution	?	1 month
1	Primary Walking Route	Busy urban shopping and business areas and main pedestrian routes	?	1 month
2	Secondary Walking Route	Medium usage routes through local areas feeding into	?	3 months

		primary routes, local shopping centres, etc.		
3	Link Footway	Linking local access footways through urban areas and busy rural footways	?	6 months
4	Local Access Footway	Footways associated with low usage, short estate roads to the main routes and cul-de-sacs	?	1 year

10.1.3 Cycleway Inspection Frequency

The following frequency for safety inspections is in place in Powys.

Cycleway Inspection Frequency				
Category	**Hierarchy Description**	**Type of Footway/Cycleway General Description**	**Inspection Frequency**	**Code of Practice**
A	Part of Carriageway	Cycle lane forming part of the carriageway, commonly 1.5m strip adjacent to the nearside kerb.	Refer to Carriageway Inspection Frequency	As for Roads
B	Remote from Carriageway	Cycle track, a highway route for cyclists not contiguous with the public footway or carriageway. Shared cycle/pedestrian paths, either segregated by a white line or other physical segregation, or un-segregated.	?	6 months
C	Cycle Trails	Cycle trails, leisure routes through open spaces.	?	1 year

10.2 Risk Matrix

The following matrix is adopted for the risk assessment for highway inspections.

Risk Probability – The probability is qualified by assessing the likelihood of users encountering the risk. As the probability is likely to increase with increasing vehicular or pedestrian flow, the road classification, network hierarchy and/or location are important considerations in the assessment.

Risk Impact - The impact is quantified by assessing the extent of damage likely to be caused should the risk become an incident. As the impact is likely to increase with increasing speed, the amount of traffic and type of road are clearly important.	**Probability Impact**	**Very Low (1)** Very low probability	**Low (2)** Low probability	**Medium (3)** Medium probability	**High (4)** High probability
	Negligible (1) Little or negligible impact	1 (Category 2.3)	2 (Category 2.3)	3 (Category 2.3)	4 (Category 2.3)
	Low (2) Minor or low impact	2 (Category 2.3)	4 (Category 2.3)	6 (Category 2.2)	8 (Category 2.2)
	Noticeable (3) Noticeable impact	3 (Category 2.3)	6 (Category 2.2)	9 (Category 2.1)	12 (Category 2.1)
	High (4) Major, high or serious impact	4 (Category 2.3)	8 (Category 2.2)	12 (Category 2.1)	16 (Category 1)

Response Category	(Category 3) Outside of the Matrix. Estimate's for future maintenance or improvement works.	(Category 2.3) To be entered into a programme of works with n expectation of completion within 24 months of the initial inspection.	(Category 2.2) To be entered into a programme of works and completed within 12 months of the initial inspection.	(Category 2.1) To be entered into a programme of works and completed within 2 months of the initial inspection.	(Category 1) Hazards should be corrected or made safe at the time of inspection. Repairs of a temporary or permanenet nature shall be carried out as soon as possible and in any case within a period of 24 hours. Permannet repair must be carried out within 28 days.

10.3 Safety Inspection Process

The objective of the highway safety inspections is to identify and risk assess assets which are unsafe. All highway assets are assessed using the same methodology.

The following processes describes how highway safety defects are recorded and repaired.

This process describes how identified highway safety defects are recorded. Note: Highway Inspections are undertaken by the Highway Supervisor.		
Step 1:	The annual timetable of highway inspections are stored in the LE System. Every week the Highway Supervisor identifies where safety inspections are to be undertaken. The Highway Supervisor prepares a 'Highway Inspection Field Sheet' for each route.	
Step 2:	The Highway Supervisor undertakes the highway inspection identifying defects and categorising them using the Highway Inspection Risk Matrix. Each category has an allocated response time. Note: The Highway Supervisor only records a quantity of Category Two defects which his resource will be able to treat within the response time. The Highway Supervisor records all the defect information on the 'Highway Inspection Field Sheet'	
Step 3:	The highest priority defects are rated Category One which are to be made safe within 24 hours and permanently repaired within 28 days The following actions are undertaken if the defect is classified as Category One.	
	Step 3a:	The Highway Supervisor contacts a work gang and instructs them to attend the site and make it safe (either temporary or permanent)
	Step 3b	The work gang attends the site and makes it safe (either temporary or permanent). They record the work undertaken and specify whether further action is required on the 'Highway Maintenance Repair' Form.
	Step 3c:	The work gang give the 'Highway Maintenance Repair' Form to the Highway Supervisor.

Step 4:	The Highway Supervisor gives the completed 'Highway Inspection Field' sheets and 'Highway Maintenance Repair' forms to the Highway Maintenance Administration Team who enters the details into the LE System.

This process describes how all highway defects which are allocated a 'Category One' or Category Two' priority rating are programmed and completed.		
Step 1:	The Highway Supervisor generates 'Outstanding Defect' Lists from the LE System and allocates them to the work gangs to complete.	
	Step 1A:	Category One Defects Every day the Highway Supervisor generates a new 'Category One' Outstanding Defect list from the LE System and allocates them to the work gang to complete.
	Step 1B:	Category Two Defects Note: Category Two Defects will only be considered once all 'Category One' defects have resource allocated. Every Thursday the Highway Supervisor generates a new 'Category Two' Outstanding Defect list from the LE System At the 'Weekly Team Meeting' on a Thursday involving Area Managers, Supervisors and Foreman / Operatives the 'Category Two' Schedule for the following week is created. 'Category Two' defects are prioritised to ensure they are all completed within 28 days of identification. The 'Category Two' defects with the highest amount of days since identification are therefore scheduled for completion first. Note: A Jetpatcher will be used in the advent of a backlog.
Step 2:	The work gang complete the defects on the 'Category One' and 'Category Two' Outstanding Defect list and note on the list the following: • Action taken • Date of work • Work Gang • Other Comments The completed 'Category One' and 'Category Two' Outstanding Defect list are returned to the Highway Supervisor.	
Step 3:	The Highway Supervisor updates the LE System by inserting a completion date.	

11 Customer Contact Centre

Customers can contact the Powys County Council Customer Contact Centre 24 hours a day.

The Contact Centre Representative records details of the 'contact' in the customer contact system, LE System.

The Contact Centre Representative is responsible for allocating a responsible PCC Department.

For Highways the customer contacts are allocated to the Highway Supervisor

Once the information is entered into the LE System it will automatically send an email to the appropriate Highway Supervisor.

Note:

i. **If the highway fault is deemed an 'emergency' the Contact Centre Representative will also ring the Highway Supervisor as well as entering it into the LE System.**

ii. **If the customer contact is received 'out of hours' the Customer Contact Centre will ring the on call staff member who will make the appropriate decision.**

11.1 Emergency

On receipt of an email and / or phone call from the Customer Contact Centre which is considered an emergency the Highway Supervisor will allocate a work gang to attend the site and 'make safe' with either a temporary or permanent repair. See Section 10.3: Safety Inspection Process for how 'Category One' and 'Category Two' defects are programmed, completed and signed off.

11.2 Non-Emergency

The following process details how a non-emergency customer query is managed:		
Step 1:	The Highway Supervisor reviews email from the LE System. All emails must be reviewed within 3 days of being sent by the LE System.	
Step 2	An assessment of the non-emergency query to identify whether action is realistically necessary and achievable is undertaken. The Highway Supervisor will appoint a competent person, considering the locality of the query, to attend the site and assess the query. This assessment must be undertaken within 10 days of the email been sent by the LE System. The following details will be reported: i. Exact problem. ii. Work required to repair the problem iii. Quantities of materials required to allow for pre-ordering if necessary iv. Plant required – any non-core plant needs to be identified to enable its timely delivery. This information must be recorded within 1 day of been collected. (where is it recorded)	
	Step 2A:	If 'No Action' is determined to be required by the assessor, the Highway Supervisor will update the LE System accordingly within 1 day of the completion of the assessment.
Step 3:	The action is programmed.	
	Step 3A	If the action is to be completed within the 'Reactive Defect Programme' see Section 10.3: Safety Inspection Process
	Step 3B	If the action is to be completed within the 'Capital Programme' see Section 3.2.1:

		Capital Allocation

12 Out of Hours

Powys County Council (PCC) has an 'Out of Hours Service Manual'.

The most up to date version is located on the PCC intranet.

This Manual is the responsibility of the Network Management Department.

13 Customer Consultation

The Highways Department uses the following customer surveys and databases to understand what is important to the Customer.

13.1 Residents Survey

Every year Powys County Council undertakes a Residents Survey where they ask 1,000 residents to provide a rating on a range of council services.

The rating options are as follows:

- Very Satisfied
- Fairly Satisfied
- Neither
- Fairly Dissatisfied
- Very Dissatisfied

The following questions relate to the highway asset:

1. Maintenance and Repair of Local Roads
2. Maintenance and Repair of Streetlighting
3. Provision of Winter Maintenance
4. Maintenance of Grass & Verges

This information is annually available on the website: http://www.powys.gov.uk/corporate/find-out-about-consultations-in-powys.

13.2 Customer Relationship Management System

The majority of times a customer contacts Powys County Council about the highways it is to 'complain'. This information is stored in the Powys County Council Customer Relationship Management System called the 'LE System'.

Every year the insert position receives a Report (insert name of report) which provides the number of occasions customers have contacted the council about problems with the highway assets.

The insert position reviews the information and decides whether any specific action needs to be undertaken on any operational or management processes currently used for the highway assets.

14 Network Availability Considerations

The list of traffic sensitive streets is documented in the Street Gazetteer located in the Aligned Assets imanage Symphony System. Streets identified as traffic sensitive have certain documented criteria for when work can be undertaken. The main example is streets with high peak time traffic volumes.

It is the responsibility of the Streetworks Team to identify whether any carriageway works are programmed on traffic sensitive streets.

If carriageway works are identified then the Streetworks Team must ensure that they comply with the specific requirements of the traffic sensitive street.

15 Utility Activity

Utility information for the location of any highway works is obtained from the Street Works Department.

The Highway Supervisor must review the provided information prior to starting the highway works to ensure that no utility infrastructure will be damaged.

If there are utilities which could be affected by the highway works it is the responsibility of the Highway Supervisor to contact the relevant authority.

16 Asset Valuation

Every year Powys County Council has to undertake a valuation of the highway assets.

A spreadsheet has being provided as part of the CSS Wales Asset Management Project.

Note: a new version of this spreadsheet is provided every year with updated regional factors, inflation indices and unit rates.

16.1 Information Types

16.1.1 Inventory

The quantity of each asset type is required for valuation. Some assets are separated into groups with similar characteristics to improve the accuracy of the valuation.

16.1.2 Condition

The condition of the asset is used to calculate the depreciation. This information is either the physical condition of the asset which is obtained by a recommended condition survey or an age.

16.1.3 Unit Rates

Unit rates are provided for the cost of returning the asset to a condition which provides the highest level of remaining life. This cost should reflect the modern equivalent asset which may be different to the current asset. An example of this is street lighting where a non-galvanised column will be replaced by an aluminium

column when it reaches a certain condition. The unit rate for the aluminium column is required for the valuation.

Note: Unit rates should include all costs associated with installation including associated traffic management requirements, staff costs and overheads.

It is important that the breakdown of the unit rate is documented to ensure that consistent unit rates are used in future valuations.

16.1.4 Additions

Additions are assets added to the network in the previous financial year.

There values are included in the total GRC, DRC and ADC for the financial year as they are also included within the total quantities as at the end of the financial year.

The reason for reporting them separately is that they are removed from the revaluation calculation which provides the change in value over the financial year. New assets would cause an over revaluation if they were included as they will generally be in good condition and have a low level of depreciation.

16.1.5 Disposals

Disposals are assets removed from the network in the previous financial year.

There values are included in the total GRC, DRC and ADC for the financial year as they are also included within the total quantities as at the end of the financial year.

The reason for reporting them separately is that they are removed from the revaluation calculation which provides the change in value over the financial year. New assets would cause an under revaluation if they were included as they could be in poor condition and have a high level of depreciation.

16.2 Carriageways

Carriageway Road Types	i.	A Road (Urban)	v.	A Road (Rural)
	ii.	B Road (Urban)	vi.	B Road (Rural)
	iii.	C Road (Urban)	vii.	C Road (Rural)
	iv.	Unclassified Road (Urban)	viii.	Unclassified Road (Rural)
% of Depreciation	A % of Depreciation which is based on the most recent SCANNER survey information is calculated by the SCANNER survey provider for each road category.			
Quantities	Quantities for all carriageway types are stored in ???.			
Unit Rates	Unit rates for carriageway gross replacement cost have been provided on a national basis by CIPFA. The GRC unit rates are deemed to include for removal and disposal of the existing asset, supply and installation of the modern equivalent asset and associated traffic management requirements, staff costs and overheads. These are provided in the CSS Wales HAMP Task 3 Asset Valuation spreadsheet. The DRC Cost unit rate is calculated using maintenance treatment rates which are determined by council officers using available cost records. The following two unit rates are required to calculate the DRC Cost unit rate: i. 100mm Inlay Rate (£/sqm) – this rate shall include works, overheads, design costs and traffic management costs.			

	ii.	Reconstruction Rate (£/sqm) – this rate includes works, overheads, design costs and traffic management costs and is to be based on reconstruction of small areas within 'surface treatment' schemes.
Additions	New carriageway is identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.	
Disposals	Carriageway removed from the network is identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.	

16.3 Footways

Footway Hierarchies	i.	Higher Amenity Footways
	ii.	Other Footways
Condition Bandings	i.	Condition 1 – As New
	ii.	Condition 2 – Aesthetically Impaired
	iii.	Condition 3 – Minor Deterioration
	iv.	Condition 4 – Major Deterioration
Quantities	Quantities for all footway types are stored in AMX	
Condition Information	Condition information for each footway type is stored in UKPMS	
Unit Rates	The footway valuation requires for each material type a reconstruction unit rate and a resurfacing unit rate. Each unit rate for footways is calculated by averaging costs of all footway schemes completed in the last financial year. These costs are stored in the Work Module of ???.	
Additions	New footway is identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.	
Disposals	Footway removed from the network is identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.	

16.4 Highway Structures

Structure Types	i.	Road Bridges
	ii.	Footbridges
	iii.	Unusual Structures
	iv.	Retaining Walls
	v.	Height, Sign and Signal Gantries
	vi.	Culverts
	vii.	Subways
Quantities	Quantities for all these structure types are stored in AMX.	
Unit Rates	The rates used to compute the structures gross replacement cost are supplied by	

	CIPFA and are incorporated into the 6ST Structures Cost Projection. The rates used for maintenance treatments are shown in the 6ST Structures Cost Projection spreadsheet as developed by the SCOTS/CSSW R/HAMP Project and agreed with the Project Board and Structures Working Group. The figures used have been estimated by the members of the structures working group representing all the local authority bridge engineers across Scotland and Wales.
Additions	New structures are identified within AMX by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Structures removed from the network are identified within AMX by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.5 Highway Lighting

16.5.1 Highway Lighting Columns

Column Groupings		
Material Type	i.	Non Galvanised Steel
	ii.	Galvanised Steel
	iii.	Concrete
	iv.	Aluminium (pre 2000)
	v.	Aluminium (post 2000)
	vi.	Stainless Steel
	vii.	Cast Iron
Height (m)	i.	5 metres
	ii.	6 metres
	iii.	8 metres
	iv.	10 metres
	v.	12 metres
Supply	i.	DNO Supply
	ii.	Private Supply
Cable Groupings	i.	Cable under Carriageway
	ii.	Cable under Footway
	iii.	Cable under Verge
Additional Columns Types	i.	Wall Brackets – Divided into DNO Supply and Private Supply
	ii.	Wooden Poles – Divided into DNO Supply and Private Supply
	iii.	High Mast Columns – Divided into DNO Supply and Private Supply

	iv. Control Cabinet – Divided into Large and Mini
Quantities	In the Asset Valuation street lighting columns are further grouped into Age Categories from 0 years to 50 years. All columns older than 50 years old are included in the 50 year age category. This information is stored in ???.
Unit Rates	Unit rates for street lighting columns are calculated by averaging the costs of all street lighting columns replaced in the last financial year. The costs of the street lighting columns are located in the Work Module of ???.
Additions	New street lighting columns are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Street lighting columns removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.5.2 Highway Lighting Luminaires

Quantities	In the Asset Valuation street lighting luminaires are further grouped into Age Categories from 0 years to 40 years. All luminaires older than 40 years old are included in the 40 year age category. This information is stored in ???.
Unit Rates	Unit rates for street lighting luminaires are calculated by averaging the costs of all street lighting luminaires replaced in the last financial year. The costs of the street lighting luminaires are located in the Work Module of ???.
Additions	New street lighting luminaires are identified within ??? selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Street lighting lumiaires removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.5.3 Illuminated Signs & Bollards

Groupings	i. Illuminated Signs ii. Illuminated Bollards
Quantities	Quantities for the illuminated signs and bollards are stored in ???.
Unit Rates	Unit rates for illuminated signs and bollards are calculated by averaging the costs of all illuminated signs and bollards replaced in the last financial year. The costs of the illuminated signs and bollards are stored in the Work Module of ???.
Additions	New illuminated signs and bollards are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Illuminated signs and bollards removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.6 Traffic Management

Traffic Management	i. Traffic Signals – Junctions

	ii. Traffic Signals – Pedestrian Crossing
Quantities	Quantities for traffic signal assets are stored in ???
Unit Rates	Unit rates for traffic signals are calculated by averaging the costs of traffic signals replaced in the five years. Powys County Council only have a small number of traffic signal assets. The renewal of these assets is not a regular occurrence so the unit rate is based on the most recent five years. The costs of the non-illuminated signs are located in the Work Module of ???.
Additions	New traffic signals are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Traffic signal assets removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7 Street Furniture

16.7.1 Traffic Signs (non-illuminated)

Quantities	Quantities for the non-illuminated traffic signs are estimated. The estimation assumes that there are 10 non-illuminated signs on every kilometre of road.
Unit Rates	Unit rates for non-illuminated traffic signs are calculated by averaging the costs of all non-illuminated traffic signs replaced in the last financial year. The costs of the non-illuminated signs are stored in the Work Module of ???.
Additions	New non-illuminated traffic signs are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Non-illuminated traffic signs removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.2 Safety Fences

Quantities	Quantities for the non-illuminated safety fences are stored in ???.
Unit Rates	Unit rates for safety fences are calculated by averaging the costs of all safety fences replaced in the last financial year. The costs of the safety fences are stored in the Work Module of ???.
Additions	New safety fences are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Safety fences removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.3 Pedestrian Barriers

Quantities	Quantities for the pedestrian barriers are stored in ???.

Unit Rates	Unit rates for pedestrian barriers are calculated by averaging the costs of all pedestrian barriers replaced in the last financial year. The costs of the pedestrian barriers are stored in the Work Module of ???.
Additions	New pedestrian barriers are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Pedestrian barriers removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.4 Street Name Plates

Quantities	Quantities for the street name plates are stored in ???.
Unit Rates	Unit rates for street name plates are calculated by averaging the costs of all street name plates replaced in the last financial year. The costs of the street name plates are stored in the Work Module of ???.
Additions	New street name plates are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Street name plates removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.5 Bins

Quantities	Quantities for the bins are stored in ???.
Unit Rates	Unit rates for bins are calculated by averaging the costs of all bins replaced in the last financial year. The costs of the bins are stored in the Work Module of ???.
Additions	New bins are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Bins removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.6 Bollards

Quantities	Quantities for the bollards are stored in ???.
Unit Rates	Unit rates for bollards are calculated by averaging the costs of all bollards replaced in the last financial year. The costs of the bollards are stored in the Work Module of ???.
Additions	New bollards are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Bollards removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.7 Bus Shelters

Quantities	Quantities for the bus shelters are stored in ???.
Unit Rates	Unit rates for bus shelters are calculated by averaging the costs of all bus shelters replaced in the last financial year. The costs of the bus shelters are stored in the Work Module of ???.
Additions	New bus shelters are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Bus shelters removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.8 Grit Bins

Quantities	Quantities for the grit bins are stored in ???.
Unit Rates	Unit rates for grit bins are calculated by averaging the costs of all grit bins replaced in the last financial year. The costs of the grit bins are stored in the Work Module of ???.
Additions	New grit bins are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Grit bins removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.9 Cattle Grids

Quantities	Quantities for the cattle grids are stored in ???.
Unit Rates	Unit rates for cattle grids are calculated by averaging the costs of all cattle grids replaced in the last financial year. The costs of the cattle grids are stored in the Work Module of ???.
Additions	New cattle grids are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Cattle grids removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.10 Gates

Quantities	Quantities for the gates are stored in ???.
Unit Rates	Unit rates for gates are calculated by averaging the costs of all gates replaced in the last financial year. The costs of the gates are stored in the Work Module of ???.
Additions	New gates are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Gates removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.11 Trees

Quantities	Quantities for the trees are stored in ???.
Unit Rates	Unit rates for trees are calculated by averaging the costs of all trees replaced in the last financial year. The costs of the trees are stored in the Work Module of ???.
Additions	New trees are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Trees removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.12 Seating

Quantities	Quantities for seating are stored in ???.
Unit Rates	Unit rates for seating are calculated by averaging the costs of all seating replaced in the last financial year. The costs of the seating are stored in the Work Module of ???.
Additions	New seating are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Seating removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.13 Verge Marker Posts

Quantities	Quantities for the verge marker posts are stored in ???.
Unit Rates	Unit rates for verge marker posts are calculated by averaging the costs of all verge marker posts replaced in the last financial year. The costs of the verge marker posts are stored in the Work Module of ???.
Additions	New verge marker posts are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Verge marker posts removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.14 Weather Stations

Quantities	Quantities for the weather stations are stored in the Winter Maintenance Manual.
Unit Rates	The unit rate for the replacement of weather stations is the cost of the last replacement. This cost is stored in ???.
Additions	New weather stations are identified within ??? by selecting assets installed within the financial year under the 'Date Installed' Inventory Attribute.
Disposals	Weather stations removed from the network are identified within ??? by selecting assets removed within the financial year under the 'Date Removed' Inventory Attribute.

16.7.15 Last Years Asset Valuation

The following information from the previous years asset valuation is used in the current years valuation to calculate the revaluation of the asset.

1. Gross Replacement Cost (GRC)
2. Depreciated Replacement Cost (DRC)
3. Annualised Depreciation Charge (ADC)

This information is stored in the previous years Asset Valuation Spreadsheet which is stored in the ??? directory on the Powys County Council Server.

17 Carriageways

The carriageway asset consists of the following assets:

- Carriageways

17.1 Asset Inventory

The carriageway asset inventory is stored in ???

The ??? is responsible for maintaining the accuracy of the inventory.

17.2 Asset Hierarchy

The concept of a highway maintenance hierarchy is the foundation of a coherent, consistent and auditable maintenance strategy. This hierarchy should reflect the needs, priorities and actual use of each road in the network and will be used as the main tool in determining policy priorities, maintenance standards, targets and performance. It is also crucial to asset management in establishing levels of service and to the network management role for developing co-ordination and regulating occupation.

The Council has a process for developing the hierarchy for carriageways which has initially been based upon traffic flows for highways. In addition, a further assessment has been undertaken to consider the type of highway, the role of the route in a local context, and a consideration of functional factors that may influence how the highway is managed. The current hierarchy is detailed in the following table.

Carriageway Hierarchy		
Category	**Hierarchy Description**	**Type of Road General Description**
2	Strategic Route	Trunk and some Principal 'A' roads between Primary Destinations
3a	Main Distributor	Major Urban Network and Inter-Primary Links; Short – medium distance traffic
3b	Secondary Distributor	Classified Road (B and C class) and unclassified urban bus routes carrying local traffic with frontage access and frequent junctions.
4a	Link Road	Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions.
4b	Local Access Road	Roads serving limited numbers of properties carrying only access traffic

The allocated hierarchy for each road is stored in the Street Gazetteer.

The hierarchy is reviewed annually by ???

17.3 Budgets

17.3.1 Budget Codes

All carriageway works are charged to one of the following budget codes.

Carriageway Budget Codes	
Carriageway Work Types	**Budget Code**
i. Reactive Defects – Category One	Revenue – Safety and Minor Repairs
ii. Reactive Defects – Category Two	Revenue – Patching and Minor Repairs
iii. Cyclical - Sweeping	Revenue – Sweeping and Cleansing
iv. Planned Maintenance (Preventative)	Revenue – Surface Dressing
v. Remedial Earthworks	Revenue – Remedial Works
vi. Planned Maintenance (Corrective)	Capital – Highway Strengthening

17.3.2 Budget Allocation

17.3.2.1 Safety and Minor Repairs

Responsible Officer – HGSSM

This budget is allocated to responding and making safe category one defects on all assets. The proportion of this budget allocated to carriageways changes annually depending on the level of defects that occur.

This budget is historically the same from year to year.

17.3.2.2 Patching & Minor Repairs

Responsible Officer – HGSSM

This budget is allocated to completing permanent repairs on category two carriageway and footway defects. The proportion of this budget allocated to carriageways changes annually depending on the level of defects that occur.

This budget is historically the same from year to year.

17.3.2.3 Sweeping and Cleansing

Responsible Officer – HGSSM

This budget is allocated to removing detritus off carriageway and footway assets and emptying and maintaining litter bins.

This budget is historically the same from year to year.

17.3.2.4 Surface Dressing

Responsible Officer – HGSSM

This budget is allocated to completing surface dressing treatments on all carriageway types.

This budget is historically the same from year to year???

17.3.2.5 Remedial Earthworks

Responsible Officer – Network Manager

This budget is used to undertake remedial earthworks on sites with programmed planned maintenance.

How is this calculated?

17.3.2.6 Highway Strengthening

Responsible Officer – Network Manager

This budget is used for carriageway planned maintenance.

The annual capital budget is allocated to the assets with the most need. This budget depends upon the priority of the carriageway schemes compared to the other assets. (see Section 12: Capital Programme Development).

17.4 Amenity Value Considerations

The following sites are constructed of non standard materials to meet the respective amenity conditions of the area.

Carriageway Amenity Locations		
Location	**Material Details**	**Quantity (m^2)**

17.5 Policies

A policy in this document refers to a 'statement of intent' that must be approved by the Council Members.

17.6 Condition Assessments

There are two conditional assessment undertaken on carriageways

The purpose of Condition Assessment is to address the key objective of Network Sustainability and to ensure that value for money is achieved when undertaking structural repairs. By following asset management principles and providing information on the nature and severity of the condition, the timing and nature of appropriate treatments can be determined. Data from these surveys are also used in the production of National Performance Indicators and repeatable condition surveys allow for analysis of trends within the network.

i. SCANNER (Surface Condition Assessment of the National Network of Roads)

   SCANNER is a traffic speed condition survey. The vehicle records longitudinal and transverse profile, rut depth, texture depth, gradient, crossfall and radius of curvature. In addition the SCANNER also records the extent of surface cracking.

ii. SCRIM (Sideway-force Coefficient Routine Investigation Machine

   SCRIM measures wet road skidding resistance, which can then be compared to investigatory levels. It should be noted that there is no value at which a surface passes from being safe to unsafe, however some sites due to geometric or other constraints often require higher levels of skidding resistance to reduce accident risks. This data is a prime factor in determining maintenance requirements on the Principal Road Network.

The SCANNER and SCRIM assessments are undertaken at the following frequencies

Annual Inspection Coverage and Frequency		
	% Inspected Annually	
Road Class	**SCANNER**	**SCRIM**
A Roads	100% (one direction)*	100% (both direction)*
B Roads	40% (one direction)*	40% (one direction)*
C Roads	20% (one direction)	20% (one direction)*
Unclassified Roads	n/a	n/a

Both types of carriageway assessments are undertaken by an external contractor.

The provision of SCANNER and SCRIM is managed by a central contract managed by the Welsh Assembly Government. This contract only covers A Roads, B Roads and C Roads.

Information is accessed via the WDM / WIP.

17.7 Reactive Maintenance

Reactive maintenance is undertaken in response to highway inspections, complaints or emergencies.

17.7.1 Work Types

The following table details the carriageway reactive maintenance treatments undertaken in Powys.

Carriageways Reactive Maintenance Treatments		
Treatment	**Notes and Typical defects**	**Responsibility**
Pothole Repair (Emergency)	Classified as Category One with 24 hour response. Make safe treatment is to fill pothole with suitable material.	Highway Supervisor
Minor Patching	Localised cracking or spalling and fretting, difference in level.	Highway Supervisor
Refurbish Traffic Calming features	Damaged road cushions, difference in levels, incorrect height, coloured surfacings , loss of surface aggregate.	Highway Supervisor
Provide Sweeper	Loose debris, excessive mud, spillages	Highway Supervisor
Provide Siding	Encroachments of verge onto the carriageway	Highway Supervisor

17.7.2 Unsurfaced Roads

Safety inspections are not undertaken on unsurfaced roads.

PCC are only made aware of defects by customers contacting the Contact Centre.

The cheapest solution is always used when treating defects on unsurfaced roads.

17.7.3 Reactive Work Programme

The Reactive Work Programme consists of ‘Category One’ and ‘Category Two’ defects identified and then assessed by the Highway Supervisor for all assets.

The development and completion of the Reactive Maintenance Programmes is described in Section 10.3: Safety Inspection Process.

17.8 Planned Maintenance

17.8.1 Treatment Types

The following table lists the planned maintenance treatments undertaken on the carriageway asset in Powys.

Carriageway Planned Maintenance Activities			
Treatment Type	Description/Comments	Anticipated Frequency (years)	
		Classified	Unclassified
Major Patching	A large number of patch repairs or a number of very large patches in a discrete area.	15	22
Surface Dressing	Application of a bituminous emulsion to the carriageway upon which one or more layers of stone chippings are applied.	7	10
Haunching	Major repairs to the edge of the carriageway.	20	30
Overlay	Addition of new surfacing materials on top of existing construction.	18	25
Resurfacing (inlay)	Removal of existing materials, surface & binder courses and replacement with new.	18	25
Reconstruction	Removal of existing construction, full or partial depth and replacement with new.	40	60
High Friction (Anti-skid) Surfacing	Application of high friction surfacing to improve skid resistance.	7	10

17.8.2 Carriageway Planned Maintenance Programme

The planned maintenance programme development process assesses all asset schemes using the same criteria. Details of the process are shown in Section 3.2.1: Capital Allocation.

17.9 Disposal

The 'Stopping Up' process is managed by the **(Insert Department responsible for managing 'Stopping Up' Orders.)**

The process for archiving all carriageway information from Asset Management System is located **(insert location of 'Stopping Up' Data Management)**

17.10 Performance Measurement

The following table describes performance measures associated with the carriageway asset.

18 Footways

The footway asset consists of the following assets:

- Footways
- Footpaths
- Cycleways

18.1 Asset Inventory

There is no footway asset inventory.

18.2 Asset Hierarchy

The concept of a footway maintenance hierarchy is the foundation of a coherent, consistent and auditable maintenance strategy. This hierarchy should reflect the needs, priorities and actual use of each footway in the network and will be used as the main tool in determining policy priorities, maintenance standards, targets and performance. It is also crucial to asset management in establishing levels of service and to the network management role for developing co-ordination and regulating occupation.

The Council has a process for developing the hierarchy for footways which is based on the functionality and scale of use. In the urban areas the contribution of the footway to the quality of public space and streetscene is particularly important. Local factors such as the age, distribution of the population, the proximity of schools or other establishments attracting higher than normal numbers of pedestrians to the area are also taken into account. The current hierarchy is detailed in the following table.

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

Cycleway Hierarchy	
Category	**Description**
A	Cycle lane forming part of the carriageway, commonly 1.5 metre strip adjacent to the nearside kerb. Cycle gaps at road closure point (no entries allowing cycle access).
B	Cycle track, a highway route for cyclists not contiguous with the public footway or carriageway. Shared cycle/pedestrian paths, either segregated by a white line or other

Cycleway Hierarchy	
Category	**Description**
	physical segregation, or un-segregated.
C	Cycle trails, leisure routes through open spaces. These are not necessarily the responsibility of the highway authority, but may be maintained by an authority under other powers or duties.

18.3 Budgets

18.3.1 Budget Codes

All footway works are charged to one of the following budget codes.

Footway Budget Codes	
Footway Work Types	**Budget Code**
i. Reactive Defects – Category One	Revenue – Safety and Minor Repairs
ii. Reactive Defects – Category Two	Revenue – Patching and Minor Repairs
iii. Planned Maintenance	Capital – Town Centre Footways

18.3.2 Budget Allocation

18.3.2.1 Patching & Minor Repairs

Responsible Officer – HGSSM

This budget is allocated to responding and making safe category one defects on all assets. The proportion of this budget allocated to footways changes annually depending on the level of defects that occur.

This budget is historically the same from year to year.

18.3.2.2 Safety and Minor Repairs

Responsible Officer – HGSSM

This budget is historically the same from year to year.

18.3.2.3 Town Centre Footways - Capital

Responsible Officer – Network Manager

This budget is used for footway planned maintenance undertaken on Category 1 and 1a hierarchy footways.

The annual capital budget is allocated to the assets with the most need. This budget depends upon the priority of the footway schemes compared to the other assets.

18.4 Amenity Value Considerations

The following sites are constructed of non standard materials to meet the respective amenity conditions of the area.

This accounts for footways where there are special footway materials. These are usually situated in town centre environments and may be either part of the town centre policy or a special surface type. It may be

difficult to source these if additional material was not purchased and stored. It is likely they will be quite expensive due to the difficulty of sourcing them.

Footway Amenity Locations		
Location	**Material Details**	**Quantity (m^2)**

18.5 Policies

The following policies associated with the footway asset have been approved by the Council Members:

18.6 Condition Assessments

There is currently no process in place in Powys to collect condition information for footways.

18.7 Reactive Maintenance

Reactive maintenance is undertaken in response to highway inspections, complaints or emergencies.

18.7.1 Work Types

The following table details the footway and cycleway reactive maintenance treatments undertaken in Powys.

Footways / Cycleways Reactive Maintenance Treatments		
Treatment	**Notes and Typical defects**	**Responsibility**
Pothole Repair (Emergency)	Classified as Category One with 24 hour response. Make safe treatment is to fill pothole with suitable material.	Highway Supervisor
Reinstate Sets / Slabs	(Repair existing) Difference in level or profile, excessive joints, loose, rocking, cracked or missing	Highway Supervisor
Reinstate Kerbs	(Repair existing) Damaged, misaligned or displaced kerbs	Highway Supervisor

18.7.2 Reactive Work Programme

The Reactive Work Programme consists of ‘Category One’ and ‘Category Two’ defects identified and then assessed by the Highway Supervisor for all assets.

The development and completion of the Reactive Maintenance Programmes is described in Section 10.3: Safety Inspection Process.

18.8 Planned Maintenance

18.8.1 Treatment Types

The following table lists the planned maintenance treatments undertaken on the footway and cycleway assets in Powys.

Footways / Cycleways Planned Maintenance Treatments		
Treatment	**Notes and Typical defects**	**Responsibility**

Footways / Cycleways Planned Maintenance Treatments		
Treatment	**Notes and Typical defects**	**Responsibility**
Thin Surfacing	Localised cracking, fine crazing and fretting	Highway Supervisor
Patch & Thin Surfacing	Localised cracking, fine crazing and fretting with Localised spalling and fretting	Highway Supervisor
Overlay > 40mm	Difference in level, Cracking, coarse crazing, severe fretting & loss of aggregate	Highway Supervisor
Inlay < 40mm	Difference in level, cracking, coarse crazing, severe, severe fretting & loss of aggregate.	Highway Supervisor
Renew Sets / Slabs	(Replace Old for New) Difference in level or profile, excessive joints, loose, rocking, cracked or missing	Highway Supervisor
Reconstruct	(Replace Old for New – blacktop only). Difference in level or profile, excessive joints, loose, rocking, cracked or missing	Highway Supervisor
Renew	(Replace Old for New) Damaged, misaligned or displaced kerbs	Highway Supervisor

18.8.2 Footway Planned Maintenance Programme

The planned maintenance programme development process assesses all asset schemes using the same criteria. Details of the process are shown in Section 3.2.1: Capital Allocation.

18.9 Disposal

The 'Stopping Up' process is managed by the **(Insert Department responsible for managing 'Stopping Up' Orders.)**

The process for archiving all footway information from the Asset Management System is located **(insert location of 'Stopping Up' Data Management)**

18.10 Performance Measurement

The following table describes performance measures associated with the footway asset.

19 Street Lighting

The street lighting asset consists of the following assets:

- Columns
- Luminaires
- Illuminated Signs
- Illuminated Bollards

19.1 Asset Inventory

There is an inventory of assets which is kept in the Mayrise Asset Management System.

The Street Lighting Manager (SLM) is responsible for the overall accuracy of the information in the Mayrise Asset Management System.

The SLM is responsible for updating the inventory in the Mayrise Asset Management System after any work is completed.

Note: Street lighting inventory is reviewed when undertaking structural and electrical inspections.

19.1.1 Numbering of Columns

PCC number their street lighting columns as follows:

- First two characters are letters of the alphabet representing the Area Code where the column is located.
- Final four characters are numbers between 1 and 9999. The numbers are applied numerically eg. if the largest current number is 1256, then the next new column will be numbered 1257.

19.2 Budgets

19.2.1 Budget Codes

All street lighting works are charged to one of the following budget codes.

Street Lighting Budget Codes	
Street Lighting Work Types	**Budget Code**
i. Reactive Maintenance	Revenue – ???
ii. Routine Maintenance	Revenue – ???
iii. Electrical Inspections	Revenue – ???
iv. Structural Inspections	Revenue – ???
v. Energy	Revenue – ???
vi. Planned Maintenance – LED Upgrade	Capital – ???
vii. Planned Maintenance – Column Renewal	Capital – ???

19.2.2 Budget Allocation

19.2.2.1 Revenue – Reactive Maintenance (insert name of budget)

Responsible Officer – SLM

This budget is allocated to responding to emergency callouts.

This budget is historically the same from year to year.

19.2.2.2 Revenue – Routine Maintenance (insert name of budget)

Responsible Officer – SLM

This budget is allocated to repairing day to day faults identified through night inspections and customer contacts.

This budget is historically the same from year to year.

19.2.2.3 Revenue – Electrical Inspections (insert name of budget)

Responsible Officer – SLM

This budget is allocated to undertaking electrical inspections.

This budget is historically the same from year to year as the same quantity of electrical inspections are completed annually.

19.2.2.4 Revenue – Structural Inspections (insert name of budget)

Responsible Officer – SLM

This budget is allocated to undertaking structural inspections.

This budget varies from year to year as the number of structural inspections completed depends upon the current age and / or results of previous inspections.

19.2.2.5 Revenue – Energy (insert name of budget)

Responsible Officer – SLM

This budget is allocated to the street lighting energy

This budget varies from year to year for the following reasons:

- The energy unit rate varies. PCC confirm the energy unit rate at the start of the financial year.
- The energy usage increases with the addition of new street lighting assets.
- The energy usage increases or decrease when lanterns are replaced.

19.2.2.6 Capital – Planned Maintenance – LED Upgrade (insert name of budget)

Responsible Officer – SLM

This budget is for implementing a long term strategy to upgrade a portion of existing lanterns to the new LED technology.

This budget was obtained as a result of a report documenting the benefits of using LED technology compared to the existing technology.

19.2.2.7 Capital - Planned Maintenance - Column Renewal (insert name of budget)

Responsible Officer – SLM

This budget is used for renewing street lighting columns.

This budget is derived ???

19.3 Amenity Value Considerations

The following street lighting assets are constructed of non-standard column materials or luminaires to meet the respective amenity conditions of the area.

Street Lighting Assets with Amenity Considerations		
Location	**Column / Luminaire Details**	**Quantity**

19.4 Policies

The following policies associated with the street lighting asset have been approved by the Council Members:

19.5 Customer Contacts

Customers contact the Powys County Council Contact Centre (PCCCC) to report street lighting faults.

The process for how these contacts are managed is detailed in Section 11: Customer Contact Centre

The following process details how the customers concern is managed from receiving it from the LE System through to confirming action has been taken.

Customer Contact Street Lighting Non-Emergency Fault Process The following process details how non-emergency street lighting faults identified by the customer are managed		
Step 1:	Every morning the SLM checks for emails from the LE System relating to non-emergency faults provided by the Customer.	
Step 2:	As it is not always 100% clear what the actual problem is the SLM instructs the Street Lighting Work Operative (SLWO) to visit the sites to assess and identify further action.	
	Step 2A:	If 'No Action' is determined to be required, the SLWO will notify the SLM. Go to Step 3
	Step 2B	If action is required the SLWO enters the defect into Mayrise. The defect is repaired following the Standard Fault Process see Section 19.7.3.2: Standard Fault Process.
Step 3:	The SLM updates the LE System when confirmation of the completed action is entered into Mayrise.	

19.5.1 Out of Hours Response

The process for Out of Hours is detailed in the 'Out of Hours Service Manual'.

The following actions are documented for street lighting:

Ref	Category	Action
???	Damage to Illuminated Road Signs and Street Lighting Columns	Make safe
???	Street Lights / Footway Lights not Working	No action unless widespread fault. Action where 3 consecutive lights out or risk to life or limb or crime prevention.

19.6 Inspections

19.6.1 Night Inspections

19.6.2 Structural Inspections

Structural testing is completed in accordance with Institution of Lighting Engineers (ILE) Technical Report TR22: Managing a Vital Asset: Lighting Supports Guidance.

All street lighting columns are inspected every six years.

The SLM is responsible for creating the Annual Structural Inspection Programme and managing the process.

Structural testing information is stored in Mayrise Asset Management System

The structural testing hard copy information is scanned and stored in Mayrise Asset Management System.

19.6.3 Electrical Inspections

Electrical testing is completed in accordance with the requirements of BS7671: Requirements of Electrical Installations

Electrical testing information is stored in Mayrise Asset Management System.

All street lighting columns are inspected every six years.

The SLM is responsible for creating the Annual Electrical Inspection Programme and managing the process.

The electrical testing hard copy information is stored in Mayrise Asset Management System

Note: Brackets are visually inspected at the time of the Electrical Inspection.

19.7 Energy - Part Night Lighting

PCC have implemented a part night lighting programme as follows:

- 6,889 street lights are turned off part of the night from 00:00 to 05:00
- 2,273 street lights are turned off permanently

The status of the street light (all night / part night / turned off) is recorded in the ??? of the Mayrise Asset Management System.

19.8 Reactive Maintenance

19.8.1 Response Times

Every identified fault is recorded in the Mayrise Asset Management Systems and allocated one of the following ??? response times. The response times reflect the risk to the public of the lighting asset not functioning correctly.

Street Lighting Response Times	
Response Time Category	**Defect Types**
Emergency – two hours	???
24 hour priority	???
5 day response	???
7 day response	???

19.8.2 Fault Types

The table below provides a list of street lighting reactive maintenance fault types and the location of their associated work instructions.

Street Lighting Reactive Maintenance Fault Types		
Fault	**Work Instruction**	**Responsibility**
Lamp Change	**Location of Work Instruction**	Work Operatives
Blown Fuse	**Location of Work Instruction**	Work Operatives
Cable Fault	**Location of Work Instruction**	Work Operatives
Section Fault	**Location of Work Instruction**	Work Operatives

19.8.3 Routine Maintenance

19.8.3.1 Standard Fault Process

Street lighting defects are identified by

- public contacting the Powys County Council (PCC) Contact Centre (see Section 19.5: Customer Contacts for how this process is managed)
- Night Inspectors (NI) undertaking the two weekly inspections and identifying street lighting defects.

Standard Street Lighting Fault Process	
The following process details how street lighting defects inserted into the Mayrise System are managed through to completion.	
Step 1:	Every morning the SLM reviews the list of defects in Mayrise and creates a programme of works for the SLWOs. Defects are prioritised by length of time since entered into Mayrise
Step 2:	The SLM raises a 'Job Number' for each defect within Mayrise.
Step 3:	The SLM allocates the 'Jobs' to the SLWO's on the 'Street Lighting Job Schedule'.

	Note: This is a Mayrise report.	
Step 4:	The SLWOs complete the work and sign off with the date and their name on the 'Street Lighting Job Schedule'.	
	Step 4A:	The SLWOs update the inventory information which is provided on the 'Street Lighting Job Schedule'.
Step 5:	The SLWOs return the completed 'Street Lighting Job Schedule' to the SLM	
Step 6:	The SLM signs off the 'Job' within Mayrise and updates the inventory where necessary.	

19.9 Planned Maintenance

19.9.1 Column Renewal Programme

Street lighting columns are renewed when they get to a certain condition level where they provide a risk to the public. The results of the annual structural inspections (see Section 19.6.2) provide the information to identify these columns. A column is added to the renewal programme if it requires a retest within the six year period.

Is there a prioritisation process in the case that there was more columns on the renewals list than funding available?

What is the process for installing it – eg. is it managed through Mayrise, is there a special contract, etc.

19.9.2 New Column Process

PCC have a policy on 'New Columns'

Currently no new street lighting is able to be approved.

19.10 Disposal

The SLWOs are responsible of disposing of all replaced equipment.

The process for archiving all street lighting information from Mayrise Asset Management System is ???

19.11 Performance Measurement

20 Structures

The structures asset consists of the following assets:

- Road Bridges
- Footbridges
- Retaining Walls
- Culverts
- Subways
- Cattle Grids

20.1 Asset Inventory

There is an inventory of assets which is kept in the Expert (AMX) Asset Management System.

The responsibility of this inventory is the Network Management Officer.

20.2 Budget Allocation

All structures works are charged to one of the following budget codes.

Footway Budget Codes	
Footway Work Types	**Budget Code**
i. Structural Inspections	Revenue – Bridge Inspection and Assessment
ii. Bridge Routine Maintenance	Revenue – Bridge Structural Maintenance
iii. Structures Cyclic	Revenue – Cleaning of Bridge, Culverts, Subway
iv. Retaining Walls & Cattle Grids	Revenue – Retaining Walls & Cattle Grids
v. Retaining Walls & Structures	Revenue – Retaining Walls & Structures
vi. Structures Strengthening	Capital – Structures Strengthening

20.2.1 Budget Allocation

20.2.1.1 Bridge Inspection and Assessment

Responsible Officer – Network Management Officer

This budget is allocated to all costs incurred in undertaking bridge inspections and assessments.

This budget is historically the same from year to year.

20.2.1.2 Bridge Structural Maintenance

Responsible Officer – HGSSM

This budget is allocated to work type ???

This budget is historically the same from year to year.

20.2.1.3 Cleaning of Bridge, Culverts, Subways

Responsible Officer – HGSSM

This budget is allocated to work type ???

This budget is historically the same from year to year.

20.2.1.4 Retaining Walls & Cattle Grids

Responsible Officer – Network Manager Officer

This budget is allocated to work type ???

This budget is historically the same from year to year.

20.2.1.5 Retaining Walls & Structures

Responsible Officer – Network Manager Officer

This budget is allocated to work type ???

This budget is historically the same from year to year.

20.2.1.6 Structures Strengthening

Responsible Officer – Network Manager Officer

This budget is used for strengthening highway structures

The annual capital budget is allocated to the assets with the most need. This budget depends upon the priority of the structures schemes compared to the other assets.

20.3 Environmental Considerations

Information on Sites of Special Scientific Interest (SSSI) and Special Areas of Conservation (SAC) are located at **(Insert location of this information)**

20.4 Policies

The following policies associated with the structures asset have been approved by the Council Members:

20.4.1 Footbridges

Powys County Council takes responsibility for footbridges with the following characteristics:

- included on the Definitive Map (where is this located?)
- located in an urban area
- has a metal surface

This has been agreed with the members and is documented ???

The responsible party for all footbridges is shown in the 'Ownership' field within AMX.

20.4.2 Retaining Walls

Powys County Council only adopts retaining walls which hold up the highway asset.

All records including documents are held in AMX for both Powys County Council owned and privately owned retaining walls.

20.5 Inspections

20.5.1 Assessment Programme

A programme of structural assessments commenced in 1987 under EU Directive 85/3, subsequently amended to 89/460/EEC which specified a minimum loading capacity for highways to carry 40t 5-axle lorries and 44t 6-axle lorries.

The Council identified 1069 of the 1699 bridges that qualified for assessment, which includes British Waterways, Network Rail and British Rail Property Board (disused railway) bridges that needed structural assessment.

Since 1987 the Council has endeavoured to complete the structural assessment of the 1069 bridges. However, restricted resource and reduced budgets have limited the ability of the Council to complete the programme. As a result, in 2012 some 315 bridges still remain to be structurally assessed. These are generally smaller span bridges that were graded as low risk following a risk appraisal process carried out in 1999 by the County's bridge engineers.

Current funding levels only permit approximately 10 bridges to be assessed in a single financial year. On this basis it will take over 30 years to complete the programme which exposes the Authority to the risk of;

- Potential failure to undertake their duty under the Highway Act to protect highway users;
- Failure to act in accordance with an EU Directive.

20.5.2 Abnormal Indivisible Load (AIL) Movements

Abnormal Indivisible Loads (AILs) are those vehicles that exceed the current Construction & Use (C&U) vehicle limits as detailed in the table below;

Construction & Use Limits		
Category	**Imperial Measurement**	**Metric Measurement**
Height *	16' 3"	4.95 m
Weight	44 tonnes	44,000 kg
Width	9' 6"	2.90 m
Length	60'	18.30 m

* From Prevention of Bridge Strikes – A Good Practice Guide for Transport Managers – July 2004

The movement of AIL's is controlled by legislation under Statutory Instrument 2003 No.1998 The Road Vehicles (Authorisation of Special Types) (General) Order 2003.

Under this legislation hauliers are required to notify the Highway Authority of any movements that exceed 44 tonnes. Those loads below that weight but exceed width and/or length are only required to be notified to the relevant Police Authority.

Notifications are received either by facsimile or email. Each notification is checked for suitability of the proposed route against the vehicle details. If a load movement is unsuitable for the route proposed, ie, they are crossing a weight limited bridge or going under a height restricted bridge, then the haulier is contacted and an alternative route is proposed if one is available. The amended route is then re-submitted by the haulier. Details of all notified movements are logged including the actions taken.

The increase in wind farm proposals will lead to a large number of extraordinary AIL's coming into and through the county. This is likely to cause significant disruption to the travelling public so the council in conjunction with the Welsh Government and the Police Authority have introduced a requirement for the wind farm developers to produce Traffic Management Plans (TMP). These detail the complete route an AIL will take and

identify all potential problem areas along the route and the mitigation measures that will be taken to minimise any disruption.

20.5.3 General Inspections

A General Inspection (GI) consists of an inspection of the visible components of the structure to detect any defects or deterioration. Areas that are not safety accessible by the inspector, such as confined spaces, are not inspected.

General inspections are undertaken on structures as follows:

- A and B Roads – every two years
- C, U & Other Roads – every three years

General inspections are undertaken in accordance with **(insert specification and date)** by the Design Group.

Information from the general inspections is stored in Expert Management System (AMX) Asset Management System.

20.5.4 Principal Inspections

A Principal Inspection (PI) is a detailed examination of all the structures components to determine the full extent of any defects and/or deterioration. The suggested interval for PI's is 6 years; however this can be extended to up to 12 years following a risk assessment.

Currently no PI's are routinely undertaken on the county's structures, only being undertaken on an ad-hoc basis when requested by the inspector if they feel the condition of the structure warrants further inspection.

Principal inspections are undertaken in accordance with **(insert specification and date)** by the Design Group.

Information from the any principal inspections undertaken is stored in Expert Management System (AMX) Asset Management System.

20.5.5 Special Inspections

A Special Inspections (SI) are undertaken at times outside the normal frequency. These will be instances such as flooding, RTC's, or special monitoring following a structural assessment. General inspections are undertaken on structures as follows:

Special inspections are undertaken in accordance with **(insert specification and date)**

The Design Group is responsible for managing Special Inspections.

Information from special inspections undertaken is stored in Expert Management System (AMX) Asset Management System.

20.6 Construction / Asset Acquisition

20.7 New Assets

20.7.1 Cattle Grids

Members of the public can apply for new cattle grids.

The process is documented in ??? which is stored in ???

The Network Management Officer is responsible for managing this process.

20.8 Routine Maintenance

20.8.1 Physical Processes

The following types of faults are undertaken as Routine Maintenance.

Routine Maintenance Activities	
Structure / Substructure Component Type	**Maintenance Activity**
Piers, abutments, wing-walls, retaining walls, reinforced earth walls and crib walls.	• Remove graffiti • Remove vegetation from structure • Clear debris from bearing shelves • Clean drainage channels • Rod outlet pipes • Clear drainage outlet manhole chambers • Rod weep pipes and remove silt & debris • Check operation of valves and grease where required • Repair gap sealant to movement joints • Check pedestrian protection measures • Remove debris and bird droppings
Steel beams, girders, trusses, concrete beams and fascia's	• Remove debris and bird droppings from flanges • Clear drainage holes for box sections
Deck carriageway, verge and parapet cantilever.	• Remove grass and weeds from verges and channels • Repair gap sealant to movement joints
Expansion joints.	• Clean out debris and vegetation (water jetting where appropriate) • Clear drainage systems • Check and tighten where necessary any loose nuts and bolts, replace where necessary • Replace gaskets where there is a specific requirement in the structure maintenance manual
Metal parapets.	• Check and tighten where necessary any loose nuts and bolts, replace where necessary • Clear hollow section drain holes
Masonry and concrete parapets.	• Remove graffiti • Remove any vegetation
Bearings (elastomeric, sliding & roller).	• Remove general dirt & debris • Clean sliding and roller surfaces if accessible and regrease
Culverts.	• Remove any vegetation and debris from within the structure

20.8.2 Routine Maintenance Programme

The following process details how the 'Structures Routine Maintenance Programme' is created and completed.		
Step 1:	Design Group undertake General Inspections and Principal Inspections using either handheld devices or manual forms.	
	Step 1A:	Individual inspectors who have used the handheld devices download the General Inspection information into AMX
	Step 1B:	Individual inspectors who have used the General Inspection Forms enter the information manually into AMX. Manually completed General Inspection Forms are stored in ???
Step 2:	The Network Management Officer (NMO) downloads the 'Structures Routine Maintenance List' and selects works to be undertaken in the upcoming financial year up to the value of the approved budget. What is the prioritisation process if there was more work than available budget? The approved works are copied into the 'Structures Routine Maintenance Programme'	
Step 3:	The NMO provides the 'Structures Routine Maintenance Programme' and 'Return Sheets' to the Highways Grounds and Street Scene (HGSS)	
Step 4:	The HGSS complete the work, complete the Return Sheets and return to the NMO	
Step 5:	The NMO updates AMX.	

20.9 Planned Maintenance

20.9.1 Physical Processes

The following types of faults following specific work instructions are undertaken as Planned Maintenance.

Work Type	Work Instruction
	Location of Work Instruction
	Location of Work Instruction
	Location of Work Instruction
	Location of Work Instruction
	Location of Work Instruction

20.9.2 Structures Planned Maintenance Programme

The planned maintenance programme development process assesses all asset schemes using the same criteria. Details of the process are shown in Section 3.2.1: Capital Allocation.

20.10 Disposal

The process for disposing of a highway structure is located at **(Insert location of Structures Disposal Process)**

The process for archiving all highway structures information from the Asset Management Database is located **(insert Archiving of Structures Asset Data)**

20.11 Performance Measurement

The following table describes performance measures associated with the structures asset.

Bridge Stock Condition Indicator Average ($BSCI_{av}$)
Responsible Officer: Network Management Officer
Calculation: The $BSCI_{av}$ is calculated within the Expert (AMX) Asset Management System.
Bridge Condition Indicator Critical ($BSCI_{crit}$)
Responsible Officer: Network Management Officer
Calculation: The $BSCI_{crit}$ is calculated within the Expert (AMX) Asset Management System.

21 Traffic Signals

Powys County Council has the following traffic signal types

- Junctions
- Pedestrian Crossings

21.1 Asset Inventory

There is an inventory of assets which is kept in the ???

The responsibility of this inventory is ???

21.2 Budget

21.2.1 Budget Codes

All traffic signal works are charged to one of the following budget codes.

Traffic Signal Budget Codes	
Traffic Signal Work Types	**Budget Code**
i. Routine Maintenance	Revenue – Traffic Signal Routine Maintenance
ii. Traffic Signal Energy	Revenue – Traffic Signal Energy
iii. Planned Maintenance	Capital – Traffic Signal Capital

21.2.2 Budget Allocation

21.2.2.1 Traffic Signal Routine Maintenance

Responsible Officer – ???

This budget is allocated to undertaking all reactive maintenance and annual inspections.

This work is undertaken by a sub-contractor with a multi-year contract. The annual allocation will be as specified in the winning contract. This will change when the contract is renewed.

21.2.2.2 Traffic Signal Energy

Responsible Officer – ???

This budget is allocated to the energy used by the traffic signals.

This budget is calculated at the start of the financial year using the previous years energy consumption and the most recent unit rate.

21.2.2.3 Traffic Signal Capital

Responsible Officer – ???

This budget is allocated to renewing traffic signal equipment.

The annual capital budget is allocated to the assets with the most need. This budget depends upon the priority of the traffic signal schemes compared to the other assets.

21.3 Policies

There are no known policies associated with the traffic signal asset that have been approved by the Council Members:

21.4 Annual Inspections

The Traffic Signal Maintenance Contractor (TSMC) undertakes an electrical inspection of all traffic signal apparatus.

Full reports are provided including test certificates to the ??? who saves them on the PCC server under 'Traffic Signal Testing'.

21.5 Energy

21.6 Reactive Maintenance

21.6.1 Out of Hours Response

The process for Out of Hours is detailed in the 'Out of Hours Service Manual'.

The contract between PCC and the contractor states that 'the maintenance contractor must visit a signal site within 9 hours of receiving notification of a fault (this does not include Out of Hours).

If the signals are "all out" then the Street Lighting Section should be called to erect the standard traffic lights out of order signs (held at Depots). All other faults can await the maintenance contractor's arrival on site.

21.6.2 Fault Types

All traffic signal faults are repaired by the TSMC. The TSMC has a 'Traffic Signals Quality Manual' which provides detailed information on traffic signal specifications and work practices that they will follow in undertaking the work on PCC's traffic signals.

21.6.3 Standard Fault Process

21.7 Planned Maintenance

21.7.1 Traffic Signal Renewal Process

The planned maintenance programme development process assesses all asset schemes using the same criteria. Details of the process are shown in Section 3.2.1: Capital Allocation.

What is the process once the renewal of the traffic signal is approved?

21.8 Disposal

The Traffic Signal Contractor (TSC) is responsible for disposing of all equipment that is surplus to requirement.

21.9 Performance Measurement

The following performance measures associated with the traffic signal asset are monitored annually.

22 Weather Stations

Powys County Council has five weather stations as follows:

- Four Findlay Irvine brand
- One Vaisala brand

Currently Powys County Council has an agreement with Vaisala to undertake annual inspections and complete routine maintenance on the weather station provided by them.

There are no arrangements in place for maintaining the Findlay Irvine weather stations.

22.1 Asset Inventory

The location of all weather stations is documented in the Winter Maintenance Plan.

The specific details of the weather stations are held by the specific provider.

22.2 Budget

22.2.1 Budget Codes

All structures works are charged to one of the following budget codes.

Weather Station Budget Codes	
Weather Station Work Types	**Budget Code**
i. Annual Maintenance	Revenue – Winter Maintenance
ii. Communication Costs	Revenue – Winter Maintenance
iii. Miscellaneous Costs	Revenue – Winter Maintenance

22.2.2 Budget Allocation

22.2.2.1 Annual Maintenance

Responsible Officer – HGSSM

This budget is allocated to the following activities for the Vaisala brand weather station only:

i. Pre winter maintenance check

ii. Reactive maintenance

iii. Sensor data quality monitoring

This work is undertaken by a sub-contractor with a multi-year agreement. The annual allocation will be as specified in the agreement.

Note: there is no budget allocation for the Findlay Irvine weather stations

22.2.2.2 Communication Costs

Responsible Officer – HGSSM

This budget is for providing data every 10 minutes 365 days per year (366 days in a leap year).

This service is provided by a sub-contractor with a multi-year agreement. The annual allocation will be as specified in the agreement.

22.2.2.3 Miscellaneous Costs

Responsible Officer – Highway Grounds and Street Scene Manager (HGSSM)

This budget is allocated to the following activities for the Vaisala brand weather station only:

i. Bureau Service

ii. Help Desk

iii. Display Software

This work is undertaken by a sub-contractor with a multi-year agreement. The annual allocation will be as specified in the agreement.

22.3 Policies

A policy in this document refers to a 'statement of intent' that must be approved by the Council Members.

22.4 Annual Inspections

22.4.1 Findlay Irvine Weather Stations

No annual inspections are undertaken on weather stations provided by Findlay Irvine.

22.4.2 Vaisala Weather Station

All reactive maintenance is identified and repaired by Vaisala when undertaking their pre-season checks on their provided weather station.

22.5 Weather Station Operating Service

The main function of the weather station is to provide information to enable decisions to be made on when and where winter maintenance treatments should be undertaken.

The following process details how the weather station information is transferred to Powys County Council Officers to enable them to make the appropriate decision on applying salt.

Weather Information Process	
The process details how the weather station information is transferred to Powys County Council Officers to enable them to make the appropriate decision on applying salt.	
Step 1:	Weather information gathered by the weather station is processed by the weather station provider
Step 2:	The weather station provider sends the weather information to the Met Office.
Step 3:	The Met Office analyses the weather station data for winter maintenance purposes and sends to Powys County Council.
Step 4:	Powys County Council implement the required action documented in the Powys County Council Winter Maintenance Manual.

22.6 Reactive Maintenance

22.6.1 Findlay Irvine Weather Stations

There are currently no arrangements in place to repair reactive defects on Findlay Irvine Weather Stations.

22.6.2 Vaisala Weather Station

All reactive maintenance is identified and repaired by Vaisala when undertaking their pre-season checks on their provided weather station.

22.7 Planned Maintenance

There is currently no process for managing the renewal of a weather station.

22.8 Disposal

It is the responsibility of Viasala to dispose of any old weather station components

22.9 Performance Measurement

There is no performance measures associated with the weather station.

23 Non – illuminated Signs

This asset group includes all non-illuminated signs

23.1 Asset Inventory

There is no inventory of non-illuminated signs.

23.2 Budget

23.2.1 Budget Codes

All non-illuminated sign works are charged to one of the following budget codes.

Non-illuminated Sign Budget Codes	
Non-illuminated Sign Work Types	**Budget Code**
i. Reactive Maintenance	Revenue – Non-Illuminated Signs
ii. Traffic Signs - New	???

23.2.2 Budget Allocation

23.2.2.1 Traffic Signs – Non-Illuminated

Responsible Officer – Highway Grounds and Street Scene Manager (HGSSM)

This budget is allocated to repairing non-illuminated signs which are in an unsafe condition or in a condition which does not enable them to provide the respective safety function.

This budget is historically the same from year to year.

23.2.2.2 Traffic Signs – New

Responsible Officer – Traffic Officer

This budget is allocated to the provision of brand new signs which are approved by the Traffic Officer.

This budget is historically the same from year to year

23.3 Safety Considerations

The installation and / or removal of any non-illuminated signs are always approved by the Traffic Officer.

23.4 Policies

A policy in this document refers to a 'statement of intent' that must be approved by the Council Members.

23.5 Annual Inspections

No regular inspections are undertaken on the non-illuminated signs

23.6 Maintenance

23.6.1 Non-illuminated Sign Defects

The following types of non-illuminated sign defects are undertaken as reactive maintenance in Powys.

Non-illuminated Sign Defect Types		
Non-illuminated Sign	**Notes and Typical defects**	**Responsibility**
Faded Sign Face	Poor sign retro-reflectivity	Highway Supervisor
Knocked Over	Sign and post lying on ground	Highway Supervisor
Misaligned	Sign face is not showing in the correct direction	Highway Supervisor
Post Damage	Post is broken	Highway Supervisor

23.6.2 Standard Non-illuminated Sign Defects

Non-illuminated Sign Standard Defect Process		
This process details how non-illuminated sign defects are selected for work programmes, repaired and then signed off.		
Step 1	**Step 1Ai:**	The Highway Supervisor identifies non illuminated signs defects which require action by the following methods: i. Undertaking highway inspections ii. Responding to Customer and Member Contacts
	Step 1B:	The Highway Supervisor assesses the non-illuminated signs defects allocating a priority and enters information into the LE System.
	Step 1Bi:	If the Highway Supervisor does not apply a priority to the non-illuminated sign defect and it was identified by a Customer or Member the initial query will be signed off in the LE System.
	Step 1Bii:	If the Highway Supervisor identifies a non-illuminated sign while undertaking the safety inspection and does not apply a priority it will be not be recorded.
Step 2:	The Highway Supervisor allocates the non-illuminated sign defect to the work schedule to ensure it is repaired within the response time.	
Step 3:	If the sign face needs replacing the Highway Supervisor will liaise with the Traffic Engineer to ensure that the replacement sign still complies with the latest regulations.	
	Step 3a:	If the sign face does not need replacing the defect will be repaired. Go to Step 7.
Step 4:	The Highway Supervisor will request the new sign face from the Powys County Council (PCC) Sign Store using the 'Sign Request' form.	
Step 5:	The PCC Sign Store will manufacture the sign and arrange to deliver it to the applicable Depot.	
Step 6:	The Highway Supervisor will instruct the Work Gang to install the sign via the work programme.	
Step 7:	The work gang install the sign and note on the work programme the following: • Action taken • Date of work • Work Gang • Other Comments The completed work programme is returned to the Highway Supervisor.	
Step 8:	The Highway Supervisor updates the LE System by inserting a completion date.	

24 Drainage

The drainage asset consists of the following assets:

- Gullies
- Pipes
- Grips
- Culverts
- Ditches

24.1 Asset Inventory

There is no inventory of drainage assets.

24.2 Budget

24.2.1 Budget Codes

All drainage works are charged to one of the following budget codes.

Drainage Budget Codes	
Drainage Work Types	**Budget Code**
i. Reactive Maintenance	Revenue – Safety and Minor Repairs
ii. Cyclic - Ditching & Grips	Revenue – Ditching & Grips
iii. Cyclic - Routine Jetting / Gully Emptying	Revenue – Routine Jetting / Gully Emptying
iv. Major Drainage	Capital – Major Drainage

24.2.2 Budget Allocation

24.2.2.1 Safety and Minor Repairs

Responsible Officer – HGSSM

This budget is allocated to responding and making safe category one defects on all assets. The proportion of this budget allocated to drainage changes annually depending on the level of defects that occur.

This budget is historically the same from year to year.

24.2.2.2 Ditching & Grips

Responsible Officer – HGSSM

This budget is allocated to cyclical ditching and grip cleaning.

This budget is historically the same from year to year.

24.2.2.3 Routine Jetting / Gully Emptying

Responsible Officer – HGSSM

This budget is allocated to the cyclical gully emptying programme.

This budget is historically the same from year to year.

24.2.2.4 Major Drainage

Responsible Officer – Network Manager

This budget is used for planned maintenance on drainage assets.

The annual capital budget is allocated to the assets with the most need. This budget depends upon the priority of the drainage schemes compared to the other assets.

24.3 Environmental Considerations

Information on Sites of Special Scientific Interest (SSSI) and Special Areas of Conservation (SAC) are located at **(Insert location of this information)**

24.4 Policies

A policy in this document refers to a 'statement of intent' that must be approved by the Council Members.

24.5 Annual Inspections

No regular inspections are undertaken on the drainage assets.

24.6 Reactive Maintenance

Reactive maintenance is undertaken in response to highway inspections, complaints or emergencies.

24.6.1 Work Types

The following types of drainage works are undertaken as reactive maintenance in Powys.

Highway Drainage Work Types		
Treatment	**Notes and Typical defects**	**Responsibility**
Unblock Gully and Repair Defect	Gully not functioning in wet weather causing flooding	Highway Supervisor
Reinstate	(Repair existing) Ironwork Cracked or broken, Differential levels, Damaged or Blocked Chambers & Pipes	Highway Supervisor
Reinstate Piped Drainage	(Repair existing) Blocked or obstructed, Scour damage caused by flow of water, Excessive build up of silt, Partial collapse.	Highway Supervisor
Reinstate Filter Drain	(Repair existing) Displaced or Contaminated filter material, blocked or obstructed pipe work	Highway Supervisor
Reinstate Ditch	(Repair existing) Undergrowth causing obstruction, scour damage caused by flow of water, excessive build up of silt, partial collapse.	Highway Supervisor

24.6.2 Reactive Work Programme

The Reactive Work Programme consists of 'Category One' and 'Category Two' defects identified and then assessed by the Highway Supervisor for all assets.

The development and completion of the Reactive Maintenance Programmes is described in Section 10.3: Safety Inspection Process.

24.7 Cyclic Maintenance

24.7.1 Gully Cleansing

Powys County Council empty gullies once per year on the following roads:

i. Primary Gritting Routes

ii. Secondary Gritting Routes

iii. Urban Areas

The remaining gullies are emptied on a reactive basis as described in Section 9.3: Safety Inspection Process.

24.7.1.1 Gully Cleansing Work Process

Gully Cleansing Process		
The following process details how gully cleansing is programmed, completed and recorded.		
Step 1	Step 1Ai: The Highway Supervisor allocates a weekly programme of gully cleansing to the Gully Cleansing Operatives.	
Step 2:	The Gully Cleansing Operatives undertake the cleansing. All completed gullies are recorded on the HTR08a Gully Cleansing & Defect Record. The Gully Cleansing Operatives also record any other gully defects which may require additional maintenance.	
Step 3:	The Gully Cleansing Operatives give the completed HTR08a Gully Cleansing & Defect Record to the Highway Supervisor.	
Step 4:	The Highway Supervisor reviews the completed record and inserts the identified gully defects into the LE System.	
	Step 4a:	All gully defects classified as reactive will be managed using the process in Section 10.3: Safety Inspection Process
	Step 4b:	All gully defects which require renewing will be managed in Section 3.2.1: Capital Allocation.
Step 5:	The Highway Supervisor files the completed HTR08a Gully Cleansing & Defect Record in the Area Office files.	

24.7.2 Ditches and Grips

Powys County Council clears ditches and grips as follows:

i. Grips

All grips located on Primary and Secondary Gritting Routes are cleared annually in Autumn.

There is no inventory and it is the responsibility of the Work Operatives to locate and clear the grips.

ii. Ditches

Problem ditches are cleared annually in Autumn

There is no inventory and it is the responsibility of the Highway Supervisor to provide the programme to be completed.

All grips located on Primary and Secondary Gritting Routes are cleared annually in Autumn.

iii. Grips / Ditches not included in i and ii shall be treated as reactive maintenance.

24.7.2.1 Ditches / Grips Work Process

Ditches / Grips Cleansing Process
The following process details how the ditches and grips are programmed, completed and recorded.

Step 1	The Highway Supervisor allocates a weekly programme of ditches and grips to be cleared by the Work Operatives.	
Step 2:	The Work Operative undertakes the clearing of the drainage assets. All completed assets are recorded on the HTR07a Dual Form Programmed Siding / Ditching & Grips. The Works Operative also records any other drainage defects which may require additional maintenance.	
Step 3:	The Works Operative gives the completed HTR07a Dual Form Programmed Siding / Ditching & Grips to the Highway Supervisor.	
Step 4:	The Highway Supervisor reviews the completed record and inserts the identified drainage defects into the LE System.	
	Step 4a:	All drainage defects classified as reactive will be managed using the process in Section 10.3: Safety Inspection Process
	Step 4b:	All drainage defects which require renewing will be managed in Section 3.2.1: Capital Allocation.
Step 5:	The Highway Supervisor files the completed HTR07a Dual Form Programmed Siding / Ditching & Grips in the Area Office files.	

24.8 Planned Maintenance

24.8.1 Treatment Options

The following types of highway drainage treatments are undertaken as planned maintenance in Powys.

Highway Drainage Planned Maintenance Treatment Options		
Treatment	**Notes and Typical defects**	**Responsibility**
Renew	(Replace Old for New) Ironwork Cracked or broken, Differential levels, Damaged or Blocked Chambers & Pipes, Worn covers which may cause skidding in wet conditions	Highway Supervisor
Provide New	(New) Additional drainage systems to prevent ponding or flooding (Safety)	Highway Supervisor

24.8.2 Drainage Planned Maintenance Programme

The planned maintenance programme development process assesses all asset schemes using the same criteria. Details of the process are shown in Section 3.2.1: Capital Allocation.

24.9 Disposal

The following process details how a drainage asset is removed permanently from its location.

24.10 Performance Measurement

There is no performance monitoring for the drainage asset.

25 Carriageway Markings

This asset group includes all carriageway marking

25.1 Asset Inventory

Powys County Council does not currently have an inventory of carriageway marking assets.

25.2 Budget

25.2.1 Budget Codes

All carriageway marking works are charged to one of the following budget codes.

Road Marking Budget Codes	
Road Marking Work Types	**Budget Code**
i. Traffic – Carriageway Markings	Revenue – Road Markings
ii. Traffic – New Carriageway Markings	???

25.2.2 Budget Allocation

25.2.2.1 Traffic - Carriageway Markings

Responsible Officer – HGSSM

This budget is allocated to repaint carriageway markings which do not meet the required standard

This budget is historically the same from year to year.

25.2.2.2 Traffic - New Carriageway Markings

Responsible Officer – Traffic Officer

This budget is allocated to the provision of brand new carriageway markings which are approved by the Traffic Officer.

This budget is historically the same from year to year

25.3 Safety Considerations

The installation and / or removal of any carriageway markings are always approved by the Traffic Officer.

25.4 Policies

A policy in this document refers to a 'statement of intent' that must be approved by the Council Members.

25.5 Annual Inspections

No regular inspections are undertaken on the carriageway marking asset

25.6 Reactive Maintenance

25.6.1 Remarking Types

The following types of carriageway marking remarks are undertaken in Powys

Carriageway Marking Remark Types		
Remark Types	**Notes and Typical defects**	**Responsibility**
Renew – Center Line Broken	All centre line markings where there is no solid continuous white line, Missing or Greater than 30% wear, Poor retro-reflectivity	Highway Supervisor
Renew – Center Line Solid	All centre line markings where there is at least one solid continuous white line either with a second solid or a broken line. Missing or greater than 30% wear, Poor retro-reflectivity	Highway Supervisor
Renew – Edge Lines	Missing or Greater than 30% wear, Poor retro-reflectivity	Highway Supervisor
Renew – Hatched Markings	Missing or Greater than 30% wear, Poor retro-reflectivity	Highway Supervisor
Renew – Stop / Give Way Junction Markings	Missing or Greater than 30% wear, Poor retro-reflectivity	Highway Supervisor
Renew – Words & Specialist road markings	Missing or Greater than 30% wear, Poor retro-reflectivity	Highway Supervisor

25.6.2 Standard Carriageway Marking Defects

Carriageway Marking Standard Defect Process		
This process details how carriageway marking defects are selected for work programmes, remarked and then signed off.		
Step 1	**Step 1Ai:**	The Highway Supervisor identifies carriageway marking defects which require action by the following methods: i. Undertaking highway inspections ii. Responding to Customer and Member Contacts iii. Traffic Engineer observations
	Step 1B:	The Highway Supervisor assesses the carriageway marking defects allocating a priority and enters information into the LE System.
	Step 1Bi:	If the Highway Supervisor does not apply a priority to the carriageway marking defect and it was identified by a Customer or Member the initial query will be signed off in the LE System.
	Step 1Bii:	If the Highway Supervisor identifies carriageway marking while undertaking the safety inspection and does not apply a priority it will be not be recorded.
Step 2:	The Highway Supervisor creates a carriageway marking schedule to ensure it is remarked within the response time.	
Step 3:	The Highway Supervisor will liaise with the Traffic Engineer to ensure that the proposed remark still comply with the standards.	
Step 4:	~~The Highway Supervisor will instruct the Carriageway Remarking Crew to undertake the remarking~~	

	via the work programme.
Step 5:	The Carriageway Remarking Crew complete the remarking and note on the work programme the following: • Action taken • Date of work • Work Gang • Other Comments The completed work programme is returned to the Highway Supervisor.
Step 6:	The Highway Supervisor updates the LE System by inserting a completion date.

25.7 Performance Measurement

There are no forms of performance monitoring for the road marking asset.

26 Cats Eyes

This asset group includes all cats eyes

26.1 Asset Inventory

Powys County Council does not currently have an inventory of cats eye assets.

26.2 Budget

26.2.1 Budget Codes

All cats eye works are charged to one of the following budget codes.

Road Marking Budget Codes	
Road Marking Work Types	**Budget Code**
i. Traffic Safety Maintenance	Revenue – Traffic Safety
ii. Traffic – New Cats Eyes	???

26.2.2 Budget Allocation

26.2.2.1 Traffic Safety Maintenance

Responsible Officer – Highway Grounds and Street Scene Manager (HGSSM)

This budget is allocated to responding and making safe traffic safety assets. The proportion of this budget allocated to cats eyes changes annually depending on the level of defects that occur.

This budget is historically the same from year to year.

26.2.2.2 Traffic - New Cats Eyes

Responsible Officer – Traffic Officer

This budget is allocated to the provision of brand new cats eyes which are approved by the Traffic Officer.

This budget is historically the same from year to year

26.3 Safety Considerations

The installation and / or removal of any cats eyes are always approved by the Traffic Officer.

26.4 Policies

A policy in this document refers to a 'statement of intent' that must be approved by the Council Members.

26.5 Annual Inspections

No regular inspections are undertaken on the cats eye asset

26.6 Reactive Maintenance

26.6.1 Cats Eye Work Types

The following types of cats eyes work types are undertaken in Powys

Cats Eye Work Types		
Cats Eye Work Types	**Notes and Typical defects**	**Responsibility**
Renew – Catseyes / Studs Mandatory	Cats eyes / Studs are mandatory where solid continuous white lines are present, missing, incorrect level, poor reflectivity	Highway Supervisor

26.6.2 Standard Cats Eye Defects

Replacing Cats Eye Standard Process		
This process details how sites with missing cats eyes are selected for work programmes, replaced and then signed off.		
Step 1	**Step 1Ai:**	The Highway Supervisor identifies missing or damaged cats eyes which require replacing by the following methods: i. Undertaking highway inspections ii. Responding to Customer and Member Contacts iii. Traffic Engineer observations
	Step 1B:	The Highway Supervisor assesses the site with missing or damaged cats eyes, allocating a priority and enters information into the LE System.
	Step 1Bi:	If the Highway Supervisor does not apply a priority to the site with missing or damaged cats eyes and it was identified by a Customer or Member the initial query will be signed off in the LE System.
	Step 1Bii:	If the Highway Supervisor identifies sites with missing or damaged cats eyes while undertaking the safety inspection and does not apply a priority it will be not be recorded.
Step 2:	The Highway Supervisor creates a schedule of sites with missing or damaged cats eyes. Sites are prioritised by time since identified.	
Step 3:	The Highway Supervisor will liaise with the Traffic Engineer to ensure that the replaced cats eyes will still meet the current standards.	
Step 4:	The Highway Supervisor will instruct the Carriageway Remarking Crew to undertake the remarking via the work programme.	
Step 5:	The Carriageway Remarking Crew complete the replacing of the cats eyes and note on the work programme the following: • Action taken • Work Gang • Date of work • Other Comments The completed work programme is returned to the Highway Supervisor.	
Step 6:	The Highway Supervisor updates the LE System by inserting a completion date.	

26.7 Performance Measurement

There are no forms of performance monitoring for the cats eye assets.

27 Safety Fences

This asset group includes all safety fences

27.1 Asset Inventory

There is no inventory of safety fences.

27.2 Budget

27.2.1 Budget Codes

All safety fence works are charged to one of the following budget codes.

Safety Fence Budget Codes	
Safety Fence Work Types	**Budget Code**
i. Reactive Maintenance	Revenue – Safety and Minor Repairs
ii. Planned Maintenance	Capital – ???

27.2.2 Budget Allocation

27.2.2.1 Safety and Minor Repairs

Responsible Officer – HGSSM

This budget is allocated to responding and making safe category one defects on all assets. The proportion of this budget allocated to safety fences changes annually depending on the level of defects that occur.

This budget is historically the same from year to year.

27.2.2.2 Safety Fence Capital

Responsible Officer – Network Manager

This budget is used for planned maintenance on safety fence assets.

The annual capital budget is allocated to the assets with the most need. This budget depends upon the priority of the safety fence schemes compared to the other assets.

27.3 Safety Considerations

The installation and / or removal of any safety fences are always approved by the Traffic Officer.

27.4 Policies

A policy in this document refers to a ‘statement of intent’ that must be approved by the Council Members.

27.5 Annual Inspections

No regular inspections to assess the current condition are undertaken on the safety fences asset.

27.6 Reactive Maintenance

27.6.1 Repair Types

The following types of repairs are undertaken as reactive maintenance.

Safety Fence Repair Types		
Repair Types	**Notes and Typical defects**	**Responsibility**
Accident Damage - severe	Severe deformation of beams and posts, deformed / broken items causing an additional hazard to the road user	Highway Supervisor
Accident Damage - moderate	Moderate deformation to several beams and posts	Highway Supervisor
Accident Damage - slight	Minor damage to single beam or post, may be slightly out of alignment but S/F substantially sound	Highway Supervisor
Loose assembly	More than 5m of Safety Fence unstable	Highway Supervisor
Beam Overlap – incorrect	Beam overlap not aligned with the direction of traffic	Highway Supervisor
Beam Height – incorrect	Beam height measured to centre of beam, Wire rope measured to centre of upper pair	Highway Supervisor
Beam – corrosion		Highway Supervisor
Beam – horizontal misalignment	Horizontal gaps between beams greater than 10mm	Highway Supervisor
Post – misaligned or the wrong way around		Highway Supervisor
Post – incorrect height		Highway Supervisor
Post – deterioration	Corrosion around metal post or rotting wood	Highway Supervisor
Bolt - missing	Including post bolts, lap bolts, anchor bolts and other bolt assemblies.	Highway Supervisor
Bolt – loose	Including post bolts, lap bolts, anchor bolts and other bolt assemblies.	Highway Supervisor
Bolt – corrosion	Including post bolts, lap bolts, anchor bolts and other bolt assemblies.	Highway Supervisor
Shear Bolt – missing		Highway Supervisor
Shear Bolt – loose		Highway Supervisor
Shear Bolt – inadequate tolerance		Highway Supervisor
Tensioners – missing		Highway Supervisor
Tensioners – loose		Highway Supervisor
Washers – missing		Highway Supervisor
Unable to inspect due to vegetation or detritus		Highway Supervisor
Other	eg. damaged support brakets	Highway Supervisor

27.6.2 Reactive Work Programming

The Reactive Work Programme consists of ‘Category One’ and ‘Category Two’ defects identified and then assessed by the Highway Supervisor for all assets.

The development and completion of the Reactive Maintenance Programmes is described in Section 10.3: Safety Inspection Process.

27.7 Planned Maintenance

Planned Maintenance is defined as work required to renew the asset by extending its current life.

The planned maintenance programme development process assesses all asset schemes using the same criteria. Details of the process are shown in Section 3.2.1: Capital Allocation.

27.8 Performance Measurement

There are currently no performance monitoring undertaken on safety fences.

28 Pedestrian Barriers

This asset group includes all pedestrian barriers

28.1 Asset Inventory

There is no inventory of pedestrian barriers.

28.2 Budget

28.2.1 Budget Codes

All pedestrian barrier works are charged to one of the following budget codes.

Pedestrian Barrier Budget Codes	
Pedestrian Barrier Work Types	**Budget Code**
i. Reactive Maintenance	Revenue – Safety and Minor Repairs
ii. Planned Maintenance	Capital – ???

28.2.2 Budget Allocation

28.2.2.1 Safety and Minor Repairs

Responsible Officer – HGSSM

This budget is allocated to responding and making safe category one defects on all assets. The proportion of this budget allocated to pedestrian barriers changes annually depending on the level of defects that occur.

This budget is historically the same from year to year.

28.2.2.2 Pedestrian Barrier Capital

Responsible Officer – Network Manager

This budget is used for pedestrian barrier planned maintenance.

The annual capital budget is allocated to the assets with the most need. This budget depends upon the priority of the pedestrian barrier schemes compared to the other assets.

28.3 Safety Considerations

The installation and / or removal of any pedestrian barriers are always approved by the Traffic Officer.

28.4 Policies

A policy in this document refers to a ‘statement of intent’ that must be approved by the Council Members.

28.5 Annual Inspections

No regular inspections to assess the current condition are undertaken on the pedestrian barrier asset.

28.6 Reactive Maintenance

28.6.1 Repair Types

The following types of repairs are undertaken as reactive maintenance.

Pedestrian Barriers Repair Types		
Repair Type	**Notes and Typical defects**	**Responsibility**
Reinstate Pedestrian Guard Rail	(Repair existing) Damaged Pedestrian Guard Rail	Highway Supervisor

28.6.2 Reactive Work Programming

The Reactive Work Programme consists of 'Category One' and 'Category Two' defects identified and then assessed by the Highway Supervisor for all assets.

The development and completion of the Reactive Maintenance Programmes is described in Section 10.3: Safety Inspection Process.

28.7 Planned Maintenance

Planned Maintenance is defined as work required to renew the asset by extending its current life.

The planned maintenance programme development process assesses all asset schemes using the same criteria. Details of the process are shown in Section 3.2.1: Capital Allocation.

28.8 Performance Measurement

There is currently no performance monitoring undertaken on pedestrian barriers.

29 Traffic Calming

This asset group includes the following:

- Road Humps
- Speed Tables
- Speed Cushions
- Islands

29.1 Asset Inventory

There is no inventory of traffic calming assets.

29.2 Budget

29.2.1 Budget Codes

All traffic calming works are charged to one of the following budget codes.

Traffic Calming Budget Codes	
Traffic Calming Work Types	**Budget Code**
i. Reactive Maintenance	Revenue – Safety and Minor Repairs
ii. Planned Maintenance	Capital – ???

29.2.2 Budget Allocation

29.2.2.1 Safety and Minor Repairs

Responsible Officer – HGSSM

This budget is allocated to responding and making safe category one defects on all assets. The proportion of this budget allocated to traffic calming assets changes annually depending on the level of defects that occur.

This budget is historically the same from year to year.

29.2.2.2 Traffic Calming Capital

Responsible Officer – Network Manager

This budget is used for traffic calming asset planned maintenance.

The annual capital budget is allocated to the assets with the most need. This budget depends upon the priority of the traffic calming schemes compared to the other assets.

29.3 Safety Considerations

The installation and / or removal of any traffic calming are always approved by the Traffic Officer.

29.4 Policies

A policy in this document refers to a ‘statement of intent’ that must be approved by the Council Members.

29.5 Annual Inspections

No regular inspections to assess the current condition are undertaken on the traffic calming asset.

29.6 Reactive Maintenance

29.6.1 Repair Types

The following types of repairs are undertaken as reactive maintenance.

Traffic Calming Repair Types		
Repair Type	**Notes and Typical defects**	**Responsibility**
Repair Traffic Calming Asset	• Missing / dislodged blocks • Potholes / gaps within surface	Highway Supervisor

29.6.2 Reactive Work Programming

The Reactive Work Programme consists of 'Category One' and 'Category Two' defects identified and then assessed by the Highway Supervisor for all assets.

The development and completion of the Reactive Maintenance Programmes is described in Section 10.3: Safety Inspection Process.

29.7 Planned Maintenance

Planned Maintenance is defined as work required to renew the asset by extending its current life.

The planned maintenance programme development process assesses all asset schemes using the same criteria. Details of the process are shown in Section 3.2.1: Capital Allocation.

29.8 Performance Measurement

There is currently no performance monitoring undertaken on traffic calming assets.

30 Benches

This asset group includes all benches located on Powys County Council footways???

30.1 Asset Inventory

There is no inventory of benches assets

30.2 Budget

30.2.1 Budget Codes

All benches works are charged to one of the following budget codes.

Benches Budget Codes	
Benches Work Types	**Budget Code**
i. Reactive Maintenance	Revenue – Safety and Minor Repairs

30.2.2 Budget Allocation

30.2.2.1 Safety and Minor Repairs

Responsible Officer – HGSSM

This budget is allocated to responding and making safe category one defects on all assets. The proportion of this budget allocated to seating assets changes annually depending on the level of defects that occur.

This budget is historically the same from year to year.

30.3 Policies

A policy in this document refers to a 'statement of intent' that must be approved by the Council Members.

30.4 Annual Inspections

No regular inspections to assess the current condition are undertaken on the benches assets.

30.5 Reactive Maintenance

30.5.1 Repair Types

The following types of repairs are undertaken as reactive maintenance.

Traffic Calming Repair Types		
Repair Type	**Notes and Typical defects**	**Responsibility**
Replace Panel	Panel is broken or missing	Highway Supervisor
Tighten Bolts on Panels	Panels are loose	Highway Supervisor

30.5.2 Reactive Work Programming

The Reactive Work Programme consists of 'Category One' and 'Category Two' defects identified and then assessed by the Highway Supervisor for all assets.

The development and completion of the Reactive Maintenance Programmes is described in Section 10.3: Safety Inspection Process.

30.6 Disposal

Who decides whether benches should be removed?

30.7 Performance Measurement

There is currently no performance monitoring undertaken on benches assets.

31 Bus Stations

Bus stations are managed by the Transportation Manager

Highway Grounds and Street Scene (HGSS) undertake reactive maintenance when required after consulting with the Transportation Manager.

32 Verges

This asset group includes all verges

32.1 Asset Inventory

Powys County Council does not currently have an inventory of verges.

32.2 Budget

The verge maintenance budget is the responsibility of the Programme Manager.

The budget allocation is historically the same from year to year.

32.3 Policies

A policy in this document refers to a 'statement of intent' that must be approved by the Council Members.

32.4 Annual Inspections

No regular inspections are undertaken on the verges.

32.5 Cyclic Maintenance

The following section describes the scope of work undertaken on urban and rural highways as specified in the Ground Maintenance Service Specifications 2015.

32.5.1 Highway Urban Areas

This encompasses:

- most adopted roadside verges inside 30 & 40 mph speed restrictions limits.

Work Undertaken:

Cut 3 times a year – depending on seasonal conditions, but usually 1st cut May, 2nd cut July, and 3rd cut September.

Weed Control – Planned treatment of town centres and estates.

32.5.2 Highway Rural Areas

This encompasses:

- all roadside verges outside of speed restriction limits

Work Undertaken:

- One safety cut on all County rural verges are cut starting middle June in order of Class 1, Class 2, Class 3 & Unclassified roads.

  Note: the same operatives complete the rural verges on the Trunk Roads. These are the highest priority and are completed prior to the verges on the County Roads.
- Safety cuts required at junctions are undertaken as necessary.

32.5.3 Management of Verge Cyclic Maintenance

All verge cyclic maintenance is undertaken by subcontractors except Class One which is undertaken by inhouse resource.

The subcontractor is required to complete the following reporting:

i. Provide a weekly programme of works one week in advance to the Programme Manager

ii. Provide a weekly report of actual work completed

iii. Update the current work programme for urban areas on the 'Grass Cutting Website'

32.6 Disposal

The 'Stopping Up' process is managed by the **(Insert Department responsible for managing 'Stopping Up' Orders.)**

The process for archiving all carriageway information from Asset Management System is located **(insert location of 'Stopping Up' Data Management)**

32.7 Performance Measurement

There are currently no performance monitoring undertaken on verges.

33 Trees

This asset group includes all trees

HGSSM are only responsible for reactive maintenance on trees.

33.1 Asset Inventory

Powys County Council does not currently have an inventory of trees.

33.2 Budget

33.2.1 Budget Codes

All tree works are charged to one of the following budget codes.

Benches Budget Codes	
Benches Work Types	**Budget Code**
i. Reactive Maintenance	Revenue – Safety and Minor Repairs

33.2.2 Budget Allocation

33.2.2.1 Safety and Minor Repairs

Responsible Officer – HGSSM

This budget is allocated to responding and making safe category one defects on all assets. The proportion of this budget allocated to seating assets changes annually depending on the level of defects that occur.

This budget is historically the same from year to year.

33.3 Policies

A policy in this document refers to a 'statement of intent' that must be approved by the Council Members.

33.4 Annual Inspections

No regular inspections are undertaken on the trees by HGSSM.

33.5 Reactive Maintenance

The highway maintenance service is only responsible for addressing highway trees which are deemed safety hazards. These are identified by

- Public contacting the Powys County Council (PCC) Contact Centre and
- Highway Supervisor undertaking inspections

The following process details the steps required in managing an unsafe highway tree.

Note: All other tree maintenance is managed by the Powys County Council Tree Officer.

Reactive Tree Maintenance Process

The following process details the steps required in managing an unsafe highway tree.		
Step 1	**Step 1Ai:**	The Highway Supervisor identifies unsafe highway trees which require action by the following methods: i. Undertaking highway inspections ii. Responding to Customer and Member Contacts
	Step 1B:	The Highway Supervisor assesses the unsafe tree allocating a priority and enters information into the LE System.
	Step 1Bi:	If the Highway Supervisor does not apply a priority to the unsafe tree and it was identified by a Customer or Member the initial query will be signed off in the LE System.
	Step 1Bii:	If the Highway Supervisor identifies an unsafe tree while undertaking the safety inspection and does not apply a priority it will be not be recorded.
Step 2:	The Highway Supervisor notifies the Powys County Council Tree Officer of the unsafe tree and requests whether any special guidance is required to enable the tree to be made safe.	
	Step 2A:	The Highway Supervisor will add any details of special guidance into the LE System.
Step 3:	The Highway Supervisor instructs the Work Gang to remove the safety issue caused by the tree via the work programme.	
Step 4:	The Work Gang make the tree safe and note on the work programme the following: • Action taken • Date of work • Work Gang • Other Comments The completed work programme is returned to the Highway Supervisor.	
Step 5:	The Highway Supervisor updates the LE System by inserting a completion date.	

33.6 Performance Measurement

There is currently no performance monitoring undertaken on trees.

34 Sweeping and Street Cleaning

Sweeping and street cleansing is a work activity undertaken on carriageways and footways.

34.1 Budget

34.1.1 Budget Codes

The sweeping and cleansing maintenance budget is the responsibility of the Highway Grounds and Street Scene Manager (HGSSM).

The budget allocation is historically the same from year to year.

34.2 Policies

A policy in this document refers to a 'statement of intent' that must be approved by the Council Members.

Currently there are no policies approved by the Council Members associated with the sweeping and cleansing.

34.3 Cyclic Maintenance

34.3.1 Street Cleansing Matrix

The following matrix shows the annual street cleaning undertaken in Powys County Council

Code of Practice Zone	Manual Cleansing & Litter Picking	Empty Litter Bins	Channel & Footway	Full Carriageways Sweep (Maintenance)
Zone 1 (Main Town Centres)	Daily by 0830 (incl. weekends)	Daily (incl. weekends)	3 weekly	Determined by safety inspection
Zone 2 (High Density Housing / Parks / Car Parks / Main Roads)	Weekly	Weekly	3 weekly	Determined by safety inspection
Zone 3 (Low Density Housing / Industrial Estates)	6 monthly	Weekly	6 monthly	Determined by safety inspection
Zone 4 (Small Towns / Large Villages)	Weekly	Weekly	3 weekly	Determined by safety inspection
Zone 4A (Small Villages)	6 monthly	Weekly	6 monthly	Determined by safety inspection
Zone 7T	Litter pick x 2 (&2 by	N/A	Kerbed areas	Determined by safety

Code of Practice Zone	Manual Cleansing & Litter Picking	Empty Litter Bins	Channel & Footway	Full Carriageways Sweep (Maintenance)
(Rural Roads – Trunk)	Verge Maintenance) (Laybys weekly)		annually	inspection
Zone 7A (Rural Roads – Class 1)	Litter pick x 2 (&2 by Verge Maintenance) (Laybys fortnightly)	N/A	Kerbed areas annually	Determined by safety inspection
Zone 7B (Rural Roads – Class 2)	Determined by safety inspection	N/A	Kerbed areas annually	Determined by safety inspection
Zone 7C (Rural Roads – Class 3)	Determined by safety inspection	N/A	Determined by safety inspection	Determined by safety inspection
Zone 7U (Rural Roads – Unclassified)	Determined by safety inspection	N/A	Determined by safety inspection	Determined by safety inspection

34.3.2 Work Process

All street cleansing activities detailed in the matrix in Section 31.3.1 are managed by the Highway Supervisor.

Work Operatives record all work undertaken on 'Street Cleansing Work Completed' Forms and give to the Highway Supervisor.

The Highway Supervisor stores these completed forms in the file in the Area Office.

34.4 Performance Measurement

There is currently no performance monitoring undertaken on sweeping and cleansing

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Cyngor Sir Powys County Council
Impact Assessment (IA)
The integrated approach to support effective decision making

Service Area	HTR	Head of Service	Nigel Brinn	Strategic Director	Paul Griffiths	Portfolio Holder	Cllr Liam Fitzpatrick
Policy / Change Objective / Budget Saving	Highways Asset Management Plan (HAMP) Development						
Outline Summary							
The council is responsible for the management of a highway asset valued at £4.366 billion which incorporates 5,800 km of road and 1,600 bridges. The adoption of a HAMP provides a basis for a strategic approach to asset management. The first HAMP was approved in 2007 and was based on a model developed with the County Surveyors Society Wales (CSSW). The Portfolio Holder for Highways proposes to approve a strategy for the continued development of the Highways Asset Management Plan (HAMP) based around the latest CSSW work on a revised HAMP framework.							

1. Version Control (services should consider the impact assessment early in the development process and continually evaluate)

Version	Author	Job Title	Date
1.0.0	Alastair Knox	Network Manager	7th April 2017

2. How does your policy / change objective / budget saving impact on the council's strategic vision?

Council Priority	How does the policy / change objective impact on this priority?	Inherent Judgement Unknown Very Poor Poor Neutral Good Very Good	What will be done to better contribute to positive or mitigate any negative impacts?	Residual Judgement Unknown Very Poor Poor Neutral Good Very Good	Source of Outline Evidence to support judgement
Services delivered for less *The HAMP has the potential to inform service changes that will reduce service costs. Current assessment suggests that the condition of the highway network will continue to deteriorate, potentially leading to greater investment requirements in future years if current standards are to be maintained.*		*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007 Powys 2020; SCANNER Survey data; CSSW Condition Projection Models.*
Supporting people in the community *Many of the services that support people in the community rely on the highway network for travelling around Powys whether on foot, by bus or other means of transport.*		*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007 Powys 2020; SCANNER Survey data; CSSW Condition Projection Models.*

Developing the economy *The highway infrastructure and its connection points with the rail network provide important links that are essential to developing the economy. Goods, services and tourism into and out of the county rely on the local highway network for vital links to the trunk roads that generally provide cross border access to the major economic centres.* *The Central Wales and Cambrian rail lines offer limited connectivity for passenger transport with users reliant on their onward journey via the highway network.* *The development of Active Travel networks together with existing highways provide opportunities for a healthy and enterprising economy.* *Much of the utility distribution infrastructure is accommodated within the highway network.*	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*
Learning *Nearly all learning related journeys will utilise the highway network either directly through using a highway to access premises or indirectly using communications in the highway for remote.*	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*

3. How does your policy / change objective / budget saving impact on the Welsh Assembly's well-being goals?

Well-being Goal	How does the policy / change objective contribute this goal?	Inherent Judgement Unknown Very Poor Poor Neutral Good Very Good	What will be done to better contribute to positive or mitigate any negative impacts?	Residual Judgement Unknown Very Poor Poor Neutral Good Very Good	Source of Outline Evidence to support judgement
The Powys Public Services Board Well-being Assessment 2016 (Draft) analysed 33 situations to identify which have the most detrimental and most favourable impact on the seven wellbeing goals in Powys. Whilst most assessments only affected one or two wellbeing goals, there was one particular goal, 'Travelling around Powys', which has a direct negative impact on four of the wellbeing goals (Prosperous, Resilient, Cohesive and Vibrant Wales). If there is no intervention then the potential negative effects in the medium-term are anticipated to extend to a further two of the wellbeing goals Healthier and Equal Wales). The only wellbeing goal not having an identified impact is a Responsible Wales.					
A prosperous Wales: An innovative, productive and low carbon society which recognises the limits of the global environment and therefore uses resources efficiently and proportionately (including acting on climate change); and which develops a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work.	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels.* *Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*
A resilient Wales: A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels.* *Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*
A healthier Wales: A society in which people's physical and mental well-being is maximised and in which choices and behaviours that benefit future health are understood.	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels.* *Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*

A Wales of cohesive communities: Attractive, viable, safe and well-connected communities.	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007 Powys 2020; SCANNER Survey data; CSSW Condition Projection Models.*
A globally responsible Wales: A nation which, when doing anything to improve the economic, social, environmental and cultural well-being of Wales, takes account of whether doing such a thing may make a positive contribution to global well-being. ***Human Rights*** *- is about being proactive in:* • *Empowering people using public services to understand, claim and enjoy their human rights* • *Increasing the ability and accountability of those delivering public services to respect, protect and fulfil human rights duties* • *Deepening our understanding of the relationships between rights-holders and duty-holders in order to help bridge the gaps between them* • *Creating the conditions under which all people can live in dignity and develop their full potential* ***UN Convention on the Rights of the Child*** *The Convention gives rights to everyone under the age of 18, which include the right to be treated fairly and to be protected from discrimination; that organisations act for the best interest of the child; the right to life, survival and development; and the right to be heard.*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007 Powys 2020; SCANNER Survey data; CSSW Condition Projection Models.*

A Wales of vibrant culture and thriving Welsh language: A society that promotes and protects culture, heritage and the Welsh language, and which encourages people to participate in the arts, and sports and recreation. *The Welsh language and culture are an integral part of our communities, and contribute to the rich heritage of the county. The two main principles of the Welsh Language Measure are that in Wales:* • *The Welsh Language should be treated no less favourably than the English language.* • *That persons should be able to live their lives through the medium of Welsh if they choose to do so.* *This section of the template is designed to assist in the analysis of gathered data and evidence, to determine the impact on the Welsh language, culture and heritage, and to identify any areas for improvement, in order to ensure the opportunities for people who choose to live their lives and access services through the medium of Welsh are not inferior to what is afforded to those choosing to do so in English.*					
Opportunities for persons to use the Welsh language *The Council has a duty to ensure that people can access services through the medium of Welsh wherever they are within the county.* *Opportunities to use the Welsh language in official and social spheres must be promoted and protected.* *Consideration should be given to the impact of policies and decisions on the sustainability of Welsh speaking communities.*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels.* *Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*
Treating the Welsh language no less favourably than the English language. *The service provided through the medium of Welsh must not be inferior to that provided through the medium of English.*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels.* *Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*
Opportunities to promote the Welsh language. *The Council must take opportunities to promote the Welsh language and services provided through the medium of Welsh.*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels.* *Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*

Welsh Language impact on staff *The Council must have sufficient Welsh speaking staff to ensure it can provide services according to the Welsh Language Standards. Under the Standards, the Council must also provide information for staff through the medium of Welsh, and provide support and training to enable them to use the Welsh language within the workplace, and provide a bilingual service for the public.*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels.* *Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	
People are encouraged to do sport, art and recreation. *Recognising the contribution that participation in sport, art and recreation can make to the well-being of individuals and communities, the Council is encouraged to take advantage of relevant opportunities where realistically possible.*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels.* *Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*

A more equal Wales: A society that enables people to fulfil their potential no matter what their background or circumstances (including their socio economic background and circumstances). *Equality is about making sure people are treated fairly. It is not about "treating everyone the same" but recognising everyone's needs are meet in different ways. This means you should determine whether a policy will assist or inhibit your ability to eliminate discrimination; advance equality; and foster good relations. Listed below are the 9 protected characteristics.* *This section of the template is designed to assist in the analysis of gathered data and evidence, to determine the impact on Equality, and to identify any areas for improvement. By taking into account the general duty this will enable the authority to demonstrate that we are making decisions in a fair, transparent and accountable way. When assessing impact you should look at diversity within, as well as between the groups e.g. Disabled people with different impairments.*					
Age *Where age is referred to, it refers to a person belonging to a particular age (e.g. 32 year olds) or range of ages (e.g. 18 - 30 year olds).*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels.* *Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*
Disability *A person has a disability if s/he has a physical or mental impairment which has a substantial and long-term adverse effect on that person's ability to carry out normal day-to-day activities*					
Gender reassignment *People who change their gender from the one assigned at birth*					
Marriage or civil partnership *Being in a marriage or civil partnership*					
Race *Being a particular colour, ethnic origin, national origin or nationality*					
Religion or belief *Having a recognised religion or belief or a lack of belief*					
Sex *Being male or female*					

Sexual Orientation *How people feel as well as act, in respect of people of the same sex, people of the opposite sex, or both sexes*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels.* *Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*
Pregnancy and Maternity *Pregnancy is the condition of being pregnant or expecting a baby.* *Maternity refers to the period after the birth, and is linked to maternity leave in the employment context. In the non-work context, protection against maternity discrimination is for 26 weeks after giving birth, and this includes treating a woman unfavourably because she is breastfeeding.*					

4. How does your policy / change objective / budget saving impact on the council's other key guiding principles?

Principle	How does the policy / change objective impact on this principle?	Inherent Judgement Unknown Very Poor Poor Neutral Good Very Good	What will be done to better contribute to positive or mitigate any negative impacts?	Residual Judgement Unknown Very Poor Poor Neutral Good Very Good	Source of Outline Evidence to support judgement
Sustainable Development Principle *The simultaneous improvement of the social, economic, environmental and cultural well-being of communities in Powys and beyond, both now and in the future, using the ways of working below.*					
Long Term: *The importance of balancing short-term needs with the need to safeguard the ability to also meet long-term needs.* *Considering long term trends when planning for the future so that problems are not stored up for later. Long term means 10 – 25 years.*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*
Collaboration: *Acting in collaboration with any other person (or different parts of the body itself) that could help the body to meet its well-being objectives.* *Working with other services and partners to find better solutions for the citizen.*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*

Involvement: *The importance of involving people with an interest in achieving the well-being goals, and ensuring that those people reflect the diversity of the area which the body serves.* *Stakeholder Communication and Engagement: Ensuring the views and voices of the stakeholders who will impacted by a policy or service change are sought, heard and used to inform and influence decisions made.*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*
Prevention: *How acting to prevent problems occurring or getting worse may help public bodies meet their objectives.* *Deploying resources to prevent problems occurring or getting worse, including for other people, communities, services or organisations.*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*
Integration: *Considering how the public body's well-being objectives may impact upon each of the well-being goals, on their other objectives, or on the objectives of other public bodies.* *Contributing to all the well-being goals and social, economic, environmental and cultural wellbeing. Consideration of how actions impact on each other, identifying the interdependencies or negative impacts on other services/ organisations.*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*

Preventing Poverty: Prevention, including helping people into work and mitigating the impact of poverty. *Reducing poverty, especially persistent poverty amongst some of our poorest people and communities, and reducing the likelihood that people will become poor. Improvements in educational and health outcomes can influence poverty strongly over the longer term.*	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*
Safeguarding: Preventing and responding to abuse and neglect of children, young people and adults with health and social care needs who can't protect themselves.	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*
Corporate Parenting: Enabling our looked after children to fulfil their potential.	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*

Impact on workforce	The HAMP will need to consider this as development progresses.	*Neutral*	*Updating the HAMP will provide a strategic framework to inform service delivery decisions on defined service levels. Further consideration may need to be given on individual impacts as the HAMP develops to look at specific elements.*	*Neutral*	*HAMP 2007* *Powys 2020;* *SCANNER Survey data;* *CSSW Condition Projection Models.*

5. Achievability of Policy / Change Objective / Budget Saving?

Impact on Service / Council	Risk to delivery of Policy / Change Objective / Budget Saving	Inherent Risk
Low (2)	*Low (2)*	*Low (2)*

6. What are the risks to service delivery or the council following implementation of this Policy / Change Objective / Budget Saving?

Description of risks			
What are the risks to the Service or Council following implementation of the Policy / Change Objective / Budget Saving?			
FINANCIAL – *Reinstatement; compensation & costs:* ***Low***			
HAZARD – *Casualty (Public Injury); Environmental; Hazard:* ***Low***			
OPERATIONAL – *Operational; Procurement / Contract / Project Failure; Service Provision:* ***Low***			
STRATEGIC – *Reputation; Strategic:* ***Low***			
Judgement (to be included in project risk register) *Based on the WHOLE assessment (sections 1 – 7), what is the risk to the Service or Council following implementation of the Policy / Change Objective / Budget Saving?* *(Please refer to the Corporate Risk Assessment Matrix below))*			
Very High Risk	**High Risk**	**Medium Risk**	**Low Risk**
			✓
Mitigating Actions			**Residual Risk**
• *Mitigation may be required depending on the proposals developed within the strategy. .*			*Medium (6)*
Does the Policy / Change Objective / Budget Saving have potential to impact on another service area?			
The highway asset provides indirect support to many other service area and therefore strategic decisions may impact on a number of service areas. These impact will potentially be minimal but further assessment may be required as elements of the strategy are developed.			

7. Overall Summary and Judgement of this Impact Assessment?

Outline Assessment (to be inserted in cabinet report)	**Cabinet Report Reference:**	May 2017 Portfolio Holder decision
The highway asset provides indirect support to many other service areas and therefore strategic decisions may impact on a number of service areas. The update of the HAMP to reflect current best practice and strategic direction will ensure that the council is able to direct investment in an appropriate manner and will provide a robust defence for litigious challenges. Further assessment may be required as elements of the HAMP strategy are developed.		

8. Is there additional evidence to support the Impact Assessment (IA)?

What additional evidence and data has informed the development of your proposal?
SCANNER Survey Data *CSSW assessment models* *Powys Public Services Baard Well-being Assessment 2016 (Draft)*

9. On-going monitoring arrangements?

What arrangements will be put in place to monitor the impact over time?
The HAMP is intended to be a living document that will evolve over time and be used to inform key decisions on service delivery and investment. A project board has been set-up to deliver the HAMP update and this is likely to continue and undertake annual reviews including the monitoring of impacts.
Impact Assessment review date: As individual elements of the HAMP strategy are considered for approval.

10. Sign Off

Position	Name	Signature	Date
Service Manager:	Shaun James		
Head of Service:	Nigel Brinn		
Strategic Director:	Paul Griffiths		
Portfolio Holder:	Cllr Liam Fitzpatrick		

It is advised that no formal decision is made unless an impact assessment has been completed to the satisfaction of the above that sufficient evidence is available to substantiate any judgements made in the impact assessment. It is the ultimate responsibility of the Strategic Director and Portfolio Holder to ensure the correct ownership and accountability is sustained.

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