

**PLACE, SUSTAINABILITY & CLIMATE CHANGE
SCRUTINY COMMITTEE**

23RD NOVEMBER 2023

**HIGHWAY ASSET MANAGEMENT PLAN –
ANNUAL STATEMENT REPORT 2023**

Purpose: To present the Highway Asset Management Plan (HAMP) Annual Statement Report 2023 for information and consideration

The Scrutiny Committee is asked to:

Review and assess the information contained in the report and provide any recommendations, comments, or advice to the Cabinet Member and / or Director prior to the report's consideration by Cabinet.

Reason(s)

To formulate views for submission to the Cabinet / Council for consideration

CABINET MEMBER PORTFOLIO HOLDER:-

Councillor Edward Thomas Cabinet Member for Transport, Waste and Infrastructure Services

Directorate: Place & Infrastructure

Head of Service:

Dan John

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**Designations: Head of
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Highway Services Manager
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EXECUTIVE SUMMARY

PLACE, SUSTAINABILITY & CLIMATE CHANGE SCRUTINY COMMITTEE

23RD NOVEMBER 2023

HIGHWAY ASSET MANAGEMENT PLAN: ANNUAL STATEMENT REPORT 2023

The Highway Asset Management Plan (HAMP) Annual Statement Reports are presented to Members each Autumn to set out the condition and performance of the highway network, how it has changed from previous years, and it includes a discussion of investment levels and options.

The Annual Report covers the following asset groups:

- Highways (carriageways, footways and cycleways).
- Bridges and Structures.
- Highway Lighting and Traffic Signals.

Background

The road network is a critical asset which supports Carmarthenshire's economy, it facilitates access to employment, education and services, it enables goods to reach shelves, and it binds together our communities.

Carmarthenshire County Council has a statutory duty to maintain the highway under the Highways Act 1980. A failure in this duty has a consequence for road users and exposes the authority to the potential risk of claims for damages.

There are significant challenges the authority faces and commitments the authority has made and, as a key item of strategic infrastructure, the highway system has an important role to play. Carbon reduction is a key goal with is becoming increasingly embedded within the HAMP process with the introduction of a carbon calculator for surfacing works, fix-first-time road repairs, LED lighting, ultra-low fleet emissions and a greater use of technology to reduce travel.

The impacts of climate change are also becoming evident, and our Maintenance Manual is being developed to include the management of Adverse Weather and our Winter Service Operation updated.

Budget pressures have had an impact with increases in material, construction and surfacing costs, and an increased cost of the winter service operation. Whilst energy costs have risen considerably, the introduction of LED lighting units has ameliorated the impact. In response to the challenging budget restrictions and deteriorating asset condition the Authority has adopted a risk-based approach in line with the National Code of Practice. This approach has been utilised in developing our Maintenance Manual.

Highways

Carmarthenshire has the second largest highway network in Wales and our roads carry the third highest levels of traffic. However, this critical asset is subject to continual deterioration due to the following mechanisms:

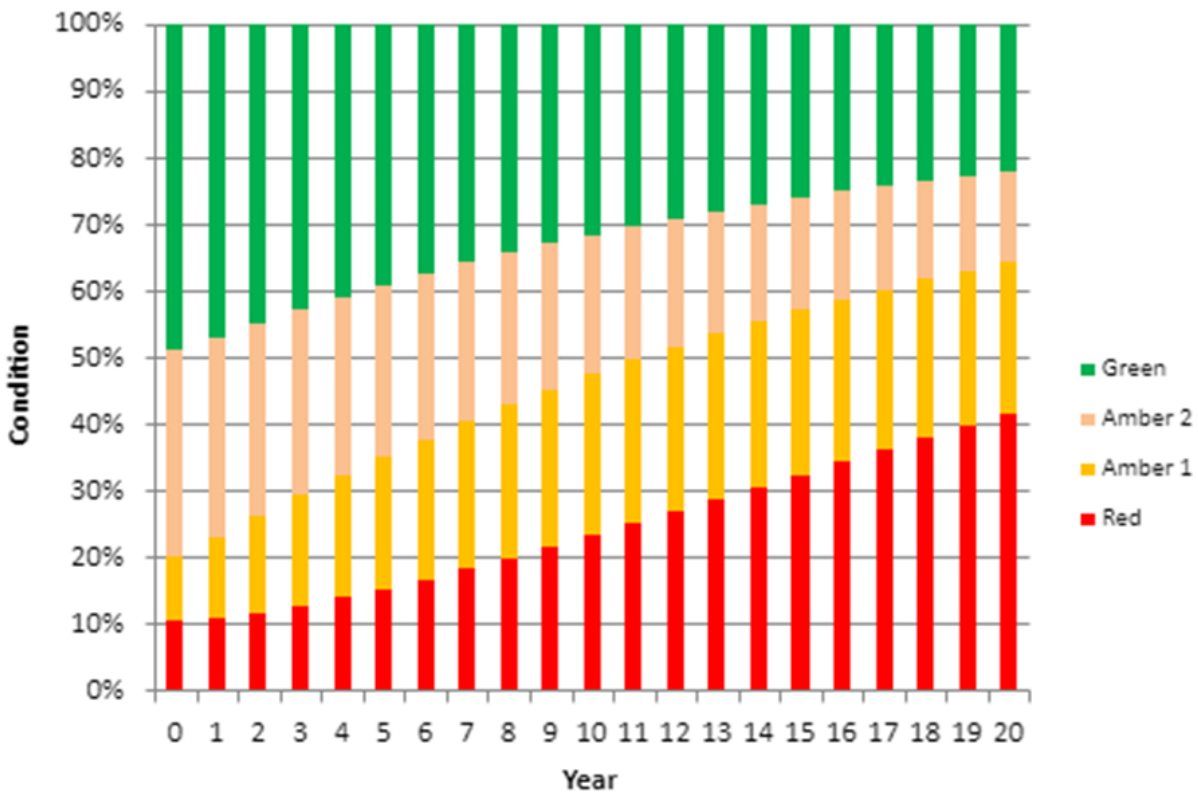
1. Road traffic, and particularly HGVs, induce significant stresses and strains in the fabric of the road.
2. Natural deterioration of the road surface as materials oxidise over time and become brittle, causing road surfaces to crack and lose aggregates.
3. Adverse weather which causes freeze/thaw in the winter and hydraulic pump effects as hydrostatic pressures from vehicle tyres transmit down through cracks into the surrounding road fabric causing damage.

This deterioration can be particularly evident after a harsh winter season and continual investment is required to maintain our roads.

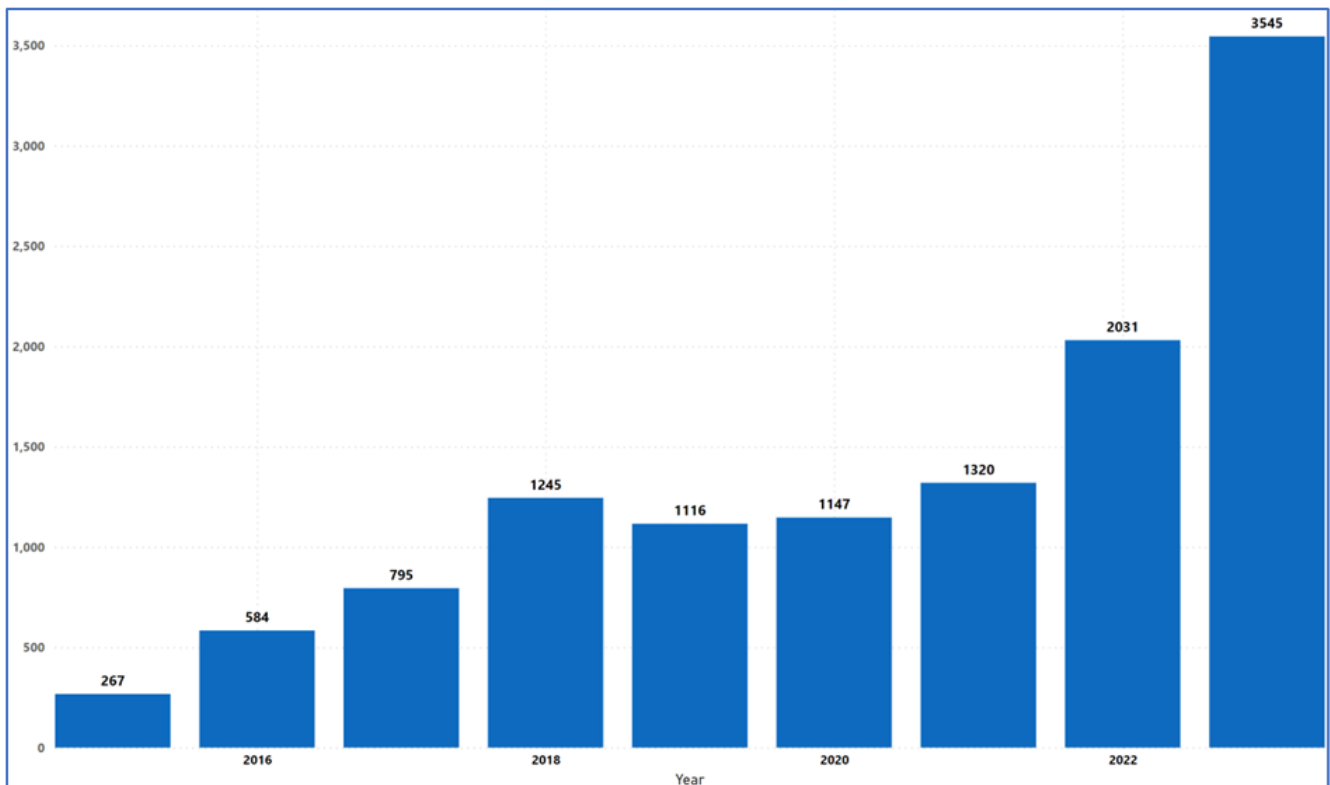
It is calculated that £8M needs to be invested every year in Carmarthenshire's road surfaces just to maintain a stable condition. In 2022/23 the Council invested £3.76M in road surfacing. This investment dropped to £1.6M in 2023/24 and is forecast to drop further to £0.6M in 2024/25. This will be the equivalent of 7.5% of the investment required to maintain our roads in a stable condition and will further extend the £63M maintenance backlog.

The forecast impact of this funding scenario is illustrated in the graph below which shows how road surfaces will deteriorate over a 20-year timeframe.

Option 1 - Condition Profile - All Roads

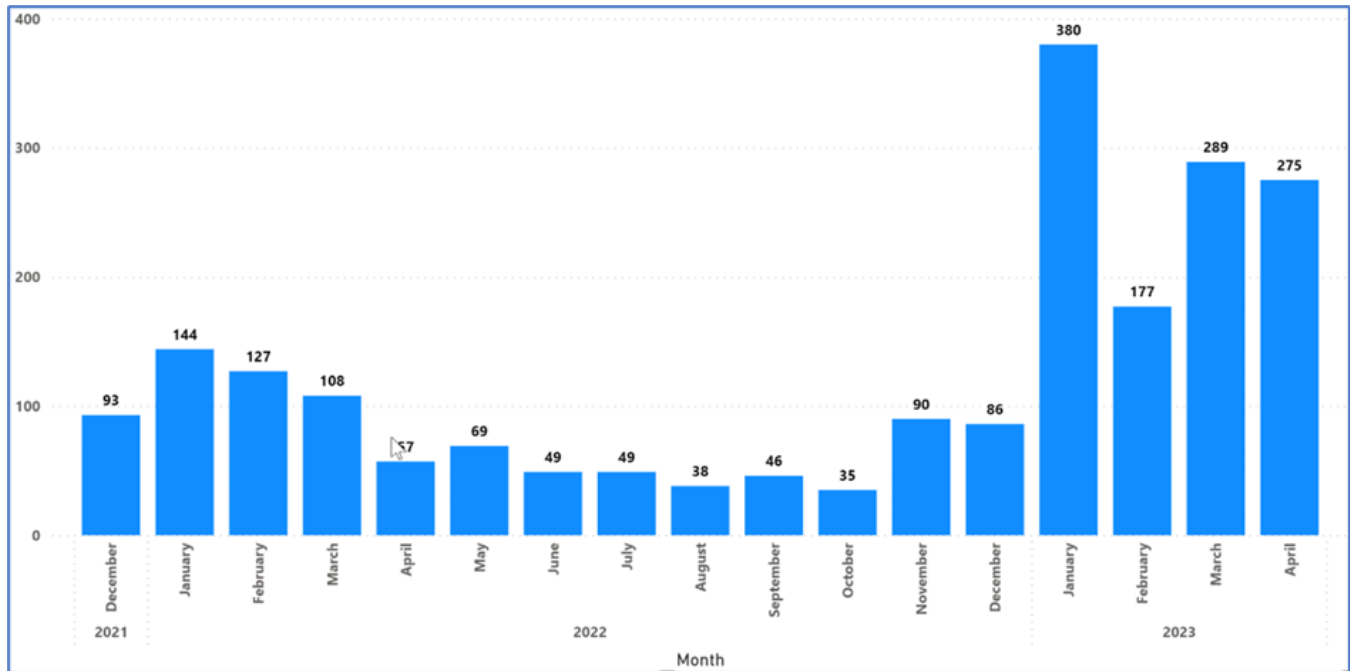


As a result of the deteriorating condition of road surfaces there has been a significant increase in the number of recorded road defects as illustrated on the graph below.



Recorded road defect totals by year 2015 – 2023 (year to date)

The increase in road defects is reflected in the increase in customer reported potholes which make up around 30% of highway customer enquiries.



Significant progress has been made regarding highway drainage systems where the allocation of £250k for five years (2022-2027) has enabled drainage surveys to be undertaken on the majority of A class roads, together with a programme of jetting to clear blockages, pipe replacements works and drainage improvement schemes.

Through 2022/23 a number of footway resurfacing schemes were brought forward through a capital investment of £265k. This enabled 12 significant footway resurfacing schemes to be undertaken. There is no funding available for footway resurfacing in 2023/24.

Highway Drainage

Climate change is increasing the frequency and intensity of adverse weather events and a effective, functioning highway drainage system is vital to take surface water off the highway. The existing highway drainage system is historic, unmapped and in variable condition.

A focused gully cleaning operation has been introduced with mobile work scheduling and a capital budget allocated which is allowing targeted repairs and jetting of identified problem areas and system surveys of our strategic roads. The surveys have indicated that 18% of the systems surveys are compromised.

Footways & Cycleways

Carmarthenshire has over 1000km of footways and cycleways, 23km of shared use paths and support 126Km of the National Cycle Network. In 2022/23 the Council invested £265,000 in resurfacing footways in 12 locations. There is no capital funding available for 2023/24.

Bridges and Structures

Carmarthenshire has a large asset stock of 799 bridges, 575 retaining walls, 529 large culverts, 50 footbridges and 5 subways. The Annual Report sets out that the bridge stock is generally in good condition but there were 47 sub-standard structures at the end of 2022/23. Each sub-standard structure requires an enhanced management regime and 5 have formal weight limits in place. Progress is being made to reduce this number, but with the current rate of investment it will take around 12 years to bring all of the structures up to standard.

Highway Lighting and Traffic Signals

Our street lighting system includes over 20,000 lighting units. We also manage 5000 units for our Town and Community Councils. LED lighting units have been introduced for County and Community lights which has reduced carbon emissions by 1,200 tonnes of carbon dioxide each year. Although unit energy costs have increased the introduction of LED lighting brought a potential energy cost down from £2.5M in 2023/24 to £1.5M. In 2022/23 the energy cost was £600k.

There are two significant challenges for the Public Lighting Team:

- Ageing lighting columns, including more than 7,000 steel columns need to be replaced to avoid the risk of collapse. A programme is underway for this.
- 304Km of deteriorating underground electrical cabling needs replacing to prevent cable faults, power outages and to ensure public safety. There is no funding currently available for this.

There are also 3,400 illuminated traffic signs and bollards on the highway network, 60 pedestrian crossings and 20 signalised junctions.

DETAILED REPORT ATTACHED ?

YES – Highway Asset Management Plan Annual Statement Report

IMPLICATIONS

I confirm that other than those implications which have been agreed with the appropriate Directors / Heads of Service and are referred to in detail below, there are no other implications associated with this report :

Signed: D. John

Head of Environmental Infrastructure

Policy, Crime & Disorder and Equalities	Legal	Finance	ICT	Risk Management Issues	Staffing Implications	Physical Assets
NONE	YES	YES	NONE	YES	NONE	YES

Legal

The County Council has a statutory duty under the Highways Act 1980 Section 41 to maintain the highway and to ensure, as far as reasonably practicable, that safe passage is not endangered by snow or ice.

Through the adoption of the HAMP and its associated Maintenance Manual, the County Council will discharge this statutory duty and operate in accordance with the national Code of Practice 'Well-managed Highway Infrastructure'.

Finance

The budgets available to local authorities to manage the highway asset are finite and under considerable pressure.

Financial impacts of the HAMP are discussed within the report and a risk-based approach has been adopted to make best use of available funding.

Risk Management Issues

The HAMP and Maintenance Manual adopt risk management as a core theme and this is discussed in detail within the report.

Physical Assets

The report discusses the condition of the highway asset and provides an outlook of asset condition in the future.

CABINET MEMBER PORTFOLIO HOLDER(S) AWARE/CONSULTED	YES
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Section 100D Local Government Act, 1972 – Access to Information List of Background Papers used in the preparation of this report:

Title of Document	File Ref No.	Locations that the papers are available for public inspection
Highway Asset Management Plan (2018)		(Public Pack)Agenda Document for Executive Board, 02/07/2018 14:00 (gov.wales)