



## Report of the Cabinet Member for Environment Enhancement and Infrastructure Management

Scrutiny Programme Committee - 13 July 2021

### Highways and Engineering, Infrastructure and Maintenance

<b>Purpose</b>	To provide a briefing to the Scrutiny Programme Committee relating to Highways and Engineering, Infrastructure and Maintenance
<b>Content</b>	This report sets out the functions, standards and operational activities of the Highways Maintenance Group but includes details on Engineering Group including Public Lighting, Car Parks and Traffic Management Infrastructure.
<b>Councillors are being asked to</b>	Consider the report, to give their views and make recommendations to Cabinet Member as necessary
<b>Lead Councillor(s)</b>	Councillor Mark Thomas, Cabinet Member for Environment Enhancement and Infrastructure Management
<b>Lead Officer(s)</b>	Stuart Davies, Head of Highways and Transportation
<b>Report Author</b>	Bob Fenwick, Group Leader Highways Maintenance Mark Thomas, Group Leader Traffic & Network Management
<b>Legal Officer</b>	Debbie Smith
<b>Finance Officer</b>	Jayne James/Aimee Dyer

#### 1. General Description

- 1.1 Highway Infrastructure is managed across several sections within Highways and Transportation. The main assets are managed by Highway Maintenance, Engineering and Traffic and Network Management Group. This report will focus on the management of the Highway Asset and Car Parks and will give a summary of maintenance regimes.

The Highways Maintenance Section covers a wide range of services which are based at Clydach Depot including Planned and Reactive Maintenance (carriageways and footways), Highway Licencing and Enforcement, Winter Maintenance, Street Works co-ordination, Highways Claims Defence, Coastal Defence and Highway Drainage and Routine Maintenance.

The Engineering Group manage public lighting and signage assets whilst the Traffic and Network Management Group manage the transport network, car parks, bridges and traffic management assets.

A full description of the Group activities were included within the Highways and Transportation commissioning report.

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1.2 The Highway Asset  
The extent of the highway asset is defined by the adopted roads network in other words all highways that are maintainable at public expense.

The highway covers approximately 1100km of carriageway, 1500km of footway/footpaths, 210 bridges, 13km of retaining wall, 29,000 lighting columns and 40,000 drainage gullies. There are 100,000's of other small assets from drains to street furniture and signs.

The local highway network is Swansea's largest, most visible and most valuable publically owned asset with a replacement value in excess of £2,000,000,000.

This report will also include similar infrastructure off highway but in Council ownership for example public car parks.

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## 2. Why We Do This

2.1 There are a number of statutory requirements relating directly to this service. The main ones are:-

**Highways Act 1980** - to assert and protect the rights of the public for the use and enjoyment of any highway.

**New Roads and Street Works Act 1991** and the **Traffic Management Act 2004** – to coordinate and control street works activities by utility companies.

2.2 Three of the five corporate priorities are particularly relevant :-

- **Safeguarding** people from harm – The Safety of the Highway

- **Transforming our economy and infrastructure** – Sustainable maintenance of the Highway and works co-ordination.
- **Transformation and future council development-** Sustainable development of the Highway

### 2.3

The consequences of the Council not fulfilling its statutory duties may lead to:

- Damage to property or injury to people.
- Claims for personal and property injury/loss.
- Negative impact on the health and safety and quality of life for residents
- Detrimental affect on the reputation and prosperity of Swansea

The functions and activities of the service have an impact on quality of life issues, perceptions of the city centre and the areas people live in. These have both social and economic consequences.

## 3. **Management and Support**

3.1 Highways Maintenance (as a group) directly employs 87 members of staff (operational and manual) and receives additional back-office support from the Finance, Purchasing and Stores section.

This is broken down into the following teams.

Routine maintenance operations are organised into 2 areas. Each area has a designated Area Manager, Supervisors, Inspectors and a team of area based operational staff. This totals approximately 61 FTE, who deal with around 60,000 enquiries a year.

Planned maintenance and drainage works are managed by a small team of 4 Engineers using both internal and external contractors to carry out resurfacing schemes and capital maintenance.

### Drainage and SAB

Two small teams of Engineers (2+2) who are responsible for land drainage, Highways Capital drainage schemes, sustainable drainage and coastal defences.

The Street Works team deals with works co-ordination. It is a team of 6 FTE's who deal with approximately 30,000 notified works on the Highways each year.

Public Lighting, a team of 19 FTE lighting engineers, electrician and operational staff.

Bridges and Structures, a team of four Engineers / technicians dealing with all highways bridge and retaining wall maintenance and design together with structural works on buildings.

Car Parks, in terms of asset management a team of 14 FTE's managing 55 car parks across Swansea.

Telematics – a team of 5 staff and an apprentice who manage the traffic light system and maintain both Swansea and NPT's network.

#### **4. Stakeholders**

4.1 All highway users are stakeholders however the following groups have a higher level of interest.

- BID and the City Centre Traders.
- Community Councils
- Environment Forum
- Natural Resources Wales
- Emergency services
- Probation Service
- Parks and Cleansing
- Housing
- Corporate Property
- Statutory Undertakers
- Public Transport Companies

#### **5. Finance**

5.1 In 2021/22 the budget for maintenance is £3.9m. This covers all routine Works. In terms of capital expenditure the annual capital allocation to highways is £3.468m with £1.34m for carriageways and £0.65m for footways.

An additional £1.4m has been allocated for the last 4 years following the commissioning report.

Further funding has been received from Welsh Government, £1.19m Capital and £713k revenue. .

The Highway Asset is ageing, with many parts exceeding their residual life. There is a backlog of over £70m of work on roads alone. This figure is recalculated every 5 years. If the additional funding received in recent years is maintained it is likely this backlog will remain stable and not continue to rise.

Funding of £231k has been allocated to car park premises and £117k on Park and Ride premises per year.

## 6. Current Performance and Trends

6.1 The service has a number of performance indicators but is also an active member of the APSE (Association of Public Sector Excellence) performance networks benchmarking group.

The main performance measure relates to road condition, with the percentage of roads in need of attention being reported.

National Indicator		17/18	18/19	19/20	20/21
THS11 a	Condition of A roads	3.2%	4.1%	4.0%	3.11%
THS11 b	Condition of B roads	4.5%	5.1%	5.1%	5.07%
THS11 c	Condition of C roads	6.7%	6.9%	7.0%	6.24%

This shows marginal improvements in A roads and B roads with a marginal decline in C roads.

The Service is also actively involved with the CSS (County Surveyors Society) Wales best practice network who use Data Unit Wales to gather and compare performance data.

National Indicator		17/18	18/19	19/20	20/21
T13	Percentage of residual signal junctions older than 15 years	8%	8%	5%	11.5%
T14	Percentage of residual pelican crossings older than 20 years	8%	8%	5%	7%
T15	Percentage of urgent faults attended to within 2 hours and rectified and cleared within 8 hours	98%	98%	98%	98%

The increase in percentage of residual installation either over 15 or 20 years is a result of higher specification equipment being installed in the early 2000's, meaning that elements of our assets are still in serviceable condition after 20 years. These PI's will be reviewed.

### **7. Notable Management Practices**

#### **7.1 Forward Works Programme**

This is an example of best practice. The network is reviewed and risk based scores given to each section of carriageway. These are based on various factors including public concern and stakeholder use. These scores are used to create the programme which is set over 5 years. The current programme is 2020 to 25 but is approximately 1 year ahead of schedule due to the additional funding.

#### **7.2 Annual Status and Options Reports**

Another example of best practice these reports are produced annually to review the effect on the network of the years work and to look at any changes to methods of working. They give statistics on performance and look at steady state requirements. This shows the level of funding required to keep the network from deteriorating further.

#### **7.3 Drainage Review**

Carried out in 2020/21, a full review of the highways drain cleaning process, focusing on prioritisation for cleaning and setting standards/methods of working for the drainage teams. This review was supported by additional funding that allowed an additional Gulley Tanker to be brought into the service. The results of the review were validated by a recent CCCS (Wales) review that recommended several areas of best practice all of which are already being followed. Following this review new methods of issuing work have been introduced that have improved logging and record keeping.

#### **7.4 Pot Hole Initiative**

This began in 2018 and since its establishment over 23,000 pot holes reported by the public have been filled. The initiative won an award in 2019 and Swansea Council were asked to speak at the Department of Transport to a national roads group.

#### **7.5 Work During the Pandemic.**

During the pandemic the service has faced difficult challenges, the highway remained open and all duties remained in place. Staff both operational and office based, were professional and pragmatic. The service remained operational throughout. Changes to programmes and the way of working were brought in to keep both the staff and public safe. One example was a change to all footway schemes avoiding residential streets to avoid conflict with social distancing. Loughor Bridge was waterproofed and re-surfaced away from properties and at a time when traffic counts were at a record low.

### 8. Future Challenges & Opportunities

8.1 The main challenges for the service in relation to this report are:-

- The need to ensure continuity of service against a backdrop of resource pressures
- Increasing demand and expectations from stakeholders
- Growing responsibility for non-highway council assets as part of an Council asset management approach to responsibility.
- An increase in traffic calming which presents maintenance challenges
- Deteriorating condition of the highway asset
- Increasing challenges due to climate change.
- Change of Ward boundaries – Each inspection route/maintenance route will need to be reviewed to amend them to match, in order to keep single points of contact for the ward. The Patch programme will also need to be reviewed as logistics, funding and programme are influenced by no of members and by ward. .
- Budget pressures when £1.4m additional funding awarded following the commissioning ends.

### 9. Risks

9.1 There is a single Directorate level risk in the risk register related to the topics of the report:-

- PL GEN 45: Highways-Failure to adequately maintain structural integrity of Carriageway& Footway Highway Assets leading to not fit for purpose and more costs.

There is significant highways maintenance backlog which will require a sustained level of increased funding to reduce. An increase in traffic, local HGV movements and prevailing weather conditions are also major contributory factors to the deterioration.

An additional risk has been identified in relation to localised damage to road condition by introducing traffic calming measures, each site is thought to reduce the durability of the supporting highway by 50% due to traction loading. This has not been added to the risk register.

## 10. Assessment

10.1 Highways Maintenance is a much reviewed service. It follows good practice and is engaged as a key participant in national projects on asset management and performance.

Highways Maintenance has been reviewed by the Scrutiny programme as follows:

Scrutiny has reviewed this service in:

- 2010 Winter Maintenance
- 2012 Highway Maintenance
- 2015 Street scene (incorporating Highway Maintenance)
- 2018 Roads and Footway Maintenance
- 2019 Highway Weed Spraying

Traffic and Network Management have been reviewed by scrutiny in

- 2017 Parking Services

Management of the Highway asset.

The Welsh Assembly Government recommends that all Welsh authorities prepare a Highways Asset Management Plan (HAMP).

This plan sets out the council's plans for the management of the council's highway asset and how we will manage the highway network to ensure we achieve our corporate priority outcomes, taking into account finance and the current asset condition, differing stakeholder needs, localised priorities and the benefits they provide over the medium to long term in terms of defined outcomes.

A new HAMP is being produced in accordance with national guidance and recommended good practice This plan has been developed in accordance with the Society of Chief Officers for Transportation in Scotland (SCOTS) / County Surveyors Society Wales (CSSW) recommended asset management practices.

The management of the asset is broken down into several distinct areas the main ones being:

- Forward Works Programme
- Annual Status and Options Report
- Performance Management
- Winter Service Plan
- Safety Inspection Manual.
- Skid Resistance Policy.



**11. Legal Implications**

11.1 There are no legal implications associated with this report other than those set out in the body of the report.

**12. Financial Implications**

12.1 There are no financial implications associated with this report.