ENVIRONMENTAL & PUBLIC PROTECTION SCRUTINY COMMITTEE

17TH NOVEMBER, 2017

HIGHWAYS NETWORK HIERARCHY

Purpose:

To Provide Members with an Update on the Proposed Implementation of a functional Hierarchy for Highways Infrastructure Investment.

To consider and comment on the following issues:

The hierarchy will support an overall Highway Asset Management Plan that prioritises highway infrastructure investment through a risk based approach in accordance with the new updated National Codes of Practice – "Well Managed Highway Infrastructure."

The hierarchy will underpin the management, prioritisation and service level for highway maintenance and infrastructure investment. It will support the council with a more auditable risk based prioritisation process.

Reasons:

The highway network is a vital asset to facilitate the safe movement of goods and people. With over 3,500 kilometers of carriageway, a reducing resource base and an increase in traffic, prioritising where resources are spent is important to assist the authority to:

- minimise risk
- meet its statutory obligations
- use a reducing resource base effectively.

It is therefore proposed to define a network hierarchy based on the function of the carriageway/section of carriageway.

Scrutiny Committee is requested to consider and comment on the report. To be referred to the Executive Board / Council for decision: YES

Executive Board Member Portfolio Holder: Cllr. H.A.L. Evans (Environment)

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EXECUTIVE SUMMARY

ENVIRONMENTAL & PUBLIC PROTECTION SCRUTINY COMMITTEE

17TH NOVEMBER, 2017

HIGHWAYS NETWORK HIERARCHY

Purpose:

Implementation of a functional Hierarchy for Highways Infrastructure Investment

1. Introduction.

Carmarthenshires highway network is the second largest in Wales and covers some 3500 kilometres. The network is subject to considerable pressures which have a detrimental impact on its condition. Our road surfaces have to withstand a range of weather conditions and ever increasing traffic levels also take their toll, particularly through heavy goods vehicles which induce great stresses into the road surface. Factors such as ground movements, utility operations and water ingress also combine to undermine the fabric of the highway. At present, surveys indicate that 9% (315km) of our highway network is in a poor condition. At current investment levels it is estimated that this will rise to 16% (560km) in 10 years and 28% (980km) in 20 years.

Managing the condition of the highway asset is a challenge that all highway authorities face and in line with national guidance this is moving towards a risk based approach with a highway hierarchy based on the function of the highway within a wider network. Historically the County Council has utilised the road classification system as the basis of prioritisation for investment i.e. A Class, B Class, C Class or Unclassified. However the road classifications are relatively simple and do not provide a sufficient breakdown when set against service needs and demands. Carmarthenshire can be seen as a predominantly rural County however the County has key economic centres and busy transport links which generate higher demand areas and subsequent risk. As such the demand led priorities across the network are not fully aligned with the general road classification.

It is therefore proposed to define a network hierarchy based on the function of the carriageway/section of carriageway.

The hierarchy shall underpin and improve the management, prioritisation and service levels for highway maintenance and infrastructure investment and will support the Council's Key outcomes from the Corporate Strategy 2015 /2020 that include:

- Making better use of resources
- People who live, work and visit Carmarthenshire are safe and feel safer
- Carmarthenshires communities and environment are sustainable
- Carmarthenshire has a stronger and more prosperous economy

In addition, developing the hierarchy to facilitate the distribution of resources is a key element of ensuring we deliver Carmarthenshire's ambition as cycling capital of Wales

It will also assist with maximising the contribution to delivery of the seven national goals of the Well-being of Future Generations (Wales) Act 2015 by developing new ways of working i.e.

- Looking at the long term so that we do not compromise the ability of future generations to meet their own needs
- Taking an integrated approach so that we look at well-being goals and objectives of other services and partners
- Collaborating working with others in a collaborative way to find shared sustainable solutions
- Involvement of a diversity of population in decisions that affect them

2. Network Hierarchy.

It is proposed to introduce a highways network hierarchy based on the latest guidance in the National Code of Practice – Well Managed Highway Infrastructure (WMHI) 2016. At the same time we will continue to work closely with other Welsh Authorities via the County Surveyors Society (CSS) Wales collaborative Highways Asset Management project both in the development of Asset management best practice and the development of common Hierarchy principles and its subsequent application. The national code of practice WMHI 2016 was enacted in October 2016 and the Authority has a two year time frame to implement.

The Network Hierarchy will determine the budget priorities through the use of a four stage process in accordance with the National Code of Practice WMHI 2016.

The four stage processes are:

- 1. Determine the Network Hierarchy
- 2. Determine inspection regime
- 3. Determine repair regime
- 4. Allocate budget priorities

The model proposed will support the development of an updated Highways Asset Management plan (HAMP) and enable resources to be allocated on a more strategic and risk assessed basis. The Authority's current Highway Maintenance Plan covered the period to 2015 however the update and adoption of a HAMP has been delayed pending the introduction of the new Code of Practice WHMI 2016 referred to above. Development of the Network Hierarchy will now allow this work to progress.

Following the development of the Highways network hierarchy the same approach will be adopted for footways, cycle routes and public rights of way as recommended by the Code of Practice WMHI 2016.

The hierarchy has been applied to all sections of highway network and will be updated following any changes or additions to the network. There will be further refinement of the initial categorisation as we develop the Asset Management policy, Maintenance Policy and HAMP. The target for developing the HAMP for approval is March 2018 to ensure we have implemented the requirements of the code of practice WMHI 2016 by the deadline of October 2018.

The proposed network hierarchy and functional descriptions are set out in Table 1.

The hierarchy structure set out by the new code of practice, Well Managed Highway Infrastructure, is consistent with the preceding code (Well Maintained Highways) however with the addition of a new lower category of 'Minor Road'.

The additional category is useful however it does not sufficiently define the different road types at the extremities of the network, including Green Lanes, BOATS (Byways Open to All Traffic), Back Lanes and also routes that have fallen into disuse.

These roads will have varying needs and the authority should consider these further subcategories to assist in their prioritisation and the effective use of resources.

The proposed hierarchy in Carmarthenshire will follow the new Code of Practice baseline categories and also provide further sub-categories at the lower level for improved local management. The sub-categories (5a-5d) can be combined as required for the purposes of all Wales comparisons and reporting requirements.

Each section of Carmarthenshire's highway network has been assessed and prioritised in accordance to the functions classified in the table.

Category	Type of road General	Description	
1.Motorway	Limited access -motorway regulations apply	Routes for fast moving long distance traffic. Fully grade separated and restrictions on use.	
2. Strategic Route	Trunk and some Principal 'A' class roads between Primary Destinations	Routes for fast moving long distance traffic with little frontage access or pedestrian traffic. Speed limits are usually in excess of 40 mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.	
3a. Main Distributor	Major Urban Network and Inter-Primary Links. Short - medium distance traffic	Routes between Strategic Routes and linking urban centres to the strategic network with limited frontage access. In urban areas speed limits are usually 40 mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety	
3b. Secondary Distributor	B and C class roads and some unclassified urban routes carrying bus, HGV and local traffic with frontage access and frequent junctions	In residential and other built up areas these roads have 20 or 30 mph speed limits and very high levels of pedestrian activity with some crossing facilities including zebra crossings. On-street parking is generally unrestricted except for safety reasons. In rural areas these roads link the larger villages, bus routes and HGV generators to the Strategic and Main Distributor Network.	
4a. Link Road	Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions	In urban areas these are often residential or industrial interconnecting roads with 20 or 30 mph speed limits, random pedestrian movements and uncontrolled parking. In rural areas these roads link the smaller villages to the distributor roads. They are of varying width and not always capable of carrying two-way traffic.	
4b. Local Access Road	Roads serving limited numbers of properties carrying only access traffic	In rural areas these roads serve small settlements and provide access to individual properties and land. They are often only single lane width and unsuitable for HGVs. In urban areas they are often residential loop roads or cul-de-sacs.	
5a. Minor Road	Little used roads serving very limited numbers of properties.	Locally defined roads	
5b. Lane	Minor routes and low use tracks that provide access to isolated properties	In rural areas these often narrow roads serving isolated agricultural buildings or properties. In urban areas these are often metalled lanes serving garages or the rear of properties	
5c. Green lane or track	Lanes and tracks that are generally unsuitable for vehicular traffic	Lanes and tracks that are unsuitable for vehicular traffic but may be used as a footpath, part of a Cycle Trail or by horse riders, generally for leisure purposes	
5d. Disused track	isused Unmetalled tracks that are unrecognisable as a road through regression or agricultural use		

Table 1. Carmarthenshire Proposed Highways Network Hierarchy

3. Conclusion.

Historically the County Council has utilised the road classification system as the basis of prioritisation. The revised National Code of Practice requires all Highway Authorities to update its policies and procedures, in response to the recommended risk based approach, by October 2018.

The Welsh County Surveyors Society is progressing with a collective approach across Wales. A key recommendation is the adoption of a functional Hierarchy to underpin strategic and operational planning.

The alternative option of remaining as we are and not adopting a Network hierarchy will reduce the authorities ability to implement recommended practice for Asset Management and may increase the risk of claims against the authority due to the inability to demonstrate a risk based approach in line with National practice.

DETAILED REPORT ATTACHED?	NO

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: S.G. Pilliner

Head of Highways and Transport

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

Finance

The Highways hierarchy will enable Highways Infrastructure investment to be targeted on a more strategic and risk based approach. Budget allocation and monitoring will need to adopt the principles of the Hierarchy as the authority develops and adopts a full Highways Asset Management plan. The Asset Management plan will set out the strategy for Highways infrastructure investment within current and forecast budget profiles.

ICT

Departmental Asset Management and Financial systems will require some adjustment to data structures and reporting as a natural development of the Hierarchy and Highway Asset Management plan.

Risk Management Issues

The Highways hierarchy and Asset Management approach, as set out by the National code of practice, provides a greater emphasis on a risk based approach. The proposal will support the authority in developing a reduced risk overall due to improved and auditable resource allocation and investment.

The Principles and Recommendations are set out in - Well Managed Highway Infrastructure Code of Practice 2016

Physical Assets

The hierarchy will allow investment and maintenance priorities to be targeted at the highest priority sections of the network subject to risk and needs assessment. It is accepted that current funding levels do not fully meet the current service needs or expectation across all parts of the network due to its extents. The improved method of resource allocation will ensure funds are allocated in the priority areas however there will naturally be lower levels adopted in less strategic/risk areas.

The existing network classifications are made up as:

A Roads – 249km B Roads – 331km C Roads – 1273km U Roads – 1660km Total - 3513km

The initial hierarchy classifications are approximately made up as:

Strategic Routes – 108km Main Distributors – 148km Secondary Distributors – 522km Link Roads – 1159km Local Access Roads – 320km Minor Roads -1109km Lanes – 32km Green Lanes or Tracks – 113km Disused Tracks – 2km (subject to change) Total – 3513km

CONSULTATIONS

I confirm that the appropriate consultations have taken in place and the outcomes are as detailed below

Signed: S.G.Pilliner

Head of Highways and Transport

1.Local Member(s)N/A.2.Community / Town Council

N/A.

3.Relevant Partners

4. Staff Side Representatives and other Organisations

Section 100D Local Government Act, 1972 – Access to Information List of Background Papers used in the preparation of this report:

THERE ARE NONE