

Moss Road Strategy

1 - Scope

This document has been drafted to:-

- enable the county council to plan capital investment in the moss roads network
- to ensure available funds are spent to best effect by prioritising preventative treatments

This will be achieved by:

- developing a moss roads hierarchy based on usage and social and economic importance so that each moss road has capital maintenance programmed regarding its structure in a manner that matches its economic, social and environmental demands against the treatments available
- focus predominantly on preventative intervention works as a way of reducing maintenance backlogs and maintaining the asset in future
- enable the prioritisation of schemes based on the moss roads hierarchy to allow a capital works programme to be developed
- agree interim measures for those roads that require maintenance but do not make the programme

2 - Introduction

Lancashire has approximately 590km of roads that are built on moss land. Whilst most of these moss roads are located in the West Lancashire Borough they are also present to a lesser extent in the districts of Wyre, Fylde, Chorley, Lancaster, South Ribble and Burnley.

The peat on which some of these roads are built causes the county council significant engineering difficulty with regards road maintenance issues. The extent of these difficulties is influenced by a number of factors including the depth of the peat on which the roads are built, the original road construction method and the volume/type of traffic using these roads.

Changes in weather patterns in recent years have exacerbated the condition of some moss roads as the moss peat upon the roads are built responds to long hot summers by shrinking and drying out. As a consequence the foundations become severely deformed leading to cracked road surfaces, deeply rutted surfaces, undulating road surfaces caused by subsidence along the road edge and/or across the carriageway width and in a number of cases, particularly where the road is on a bank of peat that is higher than the surrounding land, failing carriageway edges. Where a number of these characteristics are present in the same stretch of moss road at the same time, the carriageway maybe only passable in a family car if the driver proceeds slowly and with a great deal of care.

Previous investigations revealed that many cracks run deep into the substructure of the roads and wetter winters allow moisture to penetrate the sub-grade and cause further deterioration. As such, roads may require specialised remediation works to be undertaken, the cost of repairing a deteriorating 'moss road' is considerably higher than roads on other parts of the road network.

In 2000/2001 it was estimated that £25.1m would be required to carry out works to bring the 590km of highway that make up the moss road network up to a sufficiently acceptable standard. Current day costs would be in excess of £37m and far exceed available funding. Therefore it is vital there are mechanisms in place for prioritising capital investment in these roads some of which are used extensively to support the local agricultural and horticultural economies of the Wyre, West Lancashire and Fylde districts as well as for commuting purposes and carrying public transport routes.

3 - Moss Road Hierarchy

The Transport Asset Management Plan (TAMP) (2014) for Lancashire recognises the particular roles the moss roads play and the problems they suffer. It also identifies a need to invest in the moss roads over the life of the current TAMP which runs until 2030. However, the amount of money that would be needed to bring the entire moss road network up to a standard far exceeds the current available resources. It is vital that we have a mechanism for prioritising the investment in the moss road network and to be able to assess the maintenance demand for moss road schemes against other asset groups.

This strategy aims to provide a clear and transparent framework that will help to guide the maintenance of all roads in Lancashire that are built on moss land and ensure that capital investment in these roads over the life of the TAMP is prioritised effectively. The approach being taken is to develop a hierarchy of moss roads, with individual roads allocated to one of four classes in the hierarchy, and categorised according to its use (i.e. economic, commuter, education, etc.) and then grouped into one of four classes.

The relationship between these categories and classes is shown below:-

Moss Road Category	Moss Road Classes	Description
Economic	Primary	Routes which are vital to the economy and enable economic growth. They serve businesses or link key economic areas. They are used by long distance and medium distance travel as well as local travel.
Commuter	Primary	Routes which form a key part of the commute from origin to destination. They are primarily used as through roads which connect to economic routes.
Residential	Secondary	Link roads serving residential areas.
Education	Secondary	Link roads serving educational facilities.

Social	Secondary	Link roads serving tourist attractions, recreational or entertainment facilities.
Rural	Subsidiary	Rural link roads serving isolated rural dwellings which are not, or should not, be used as key commuter routes.
Agricultural	Other	Agricultural link roads primarily serving remote horticultural or agricultural land that does not provide substantial economic benefit.

- Primary Moss Roads – are often class "A" or "B" roads that serve as connecting routes for commuters, access to large businesses and industry, and link key economic areas together.
- Secondary Moss Roads – locally important roads with typically less traffic than primary moss roads, but which serve villages, educational and recreational facilities, and provide access to key amenities such as hospitals, police and fire stations, as well as access to tourist attractions.
- Subsidiary Moss Roads – roads that serve isolated domestic properties or farms only but may be used by the public on foot or horse
- Other Moss Roads – roads that provide access to horticultural or agricultural land only and are used by heavy horticultural or agricultural vehicles to access individual premises. They are not intended to be used by the public except on foot or by horse.

Placing moss roads into classes enables the moss roads that make up this asset type to have capital expenditure prioritised in a manner that balances economic, social and environmental demands against the financial constraints within which we have to operate. A breakdown of the moss road network by moss road class and district area is provided below:-

District	Km per Moss Road Class per District				
	Primary	Secondary	Subsidiary	Other	Grand Total
Burnley	0.00	0.00	8.31	0.00	8.31
Chorley	11.10	11.57	8.85	2.67	34.20
Fylde	36.56	9.35	13.53	10.60	70.04
Lancaster	2.08	5.51	12.09	0.00	19.68
South Ribble	1.88	4.36	9.61	0.00	15.85
West Lancashire	55.42	101.96	171.32	33.34	362.05
Wyre	2.19	38.53	34.49	4.10	79.31
Total	109.22	171.28	258.21	50.72	589.43

4 - Service Standard

Whilst the county council has a statutory duty to maintain highways as outlined in the Highways Act 1980, the standard referred to in case law reflects ordinary expected use.

Due to the nature of moss roads it is not possible to measure their condition in the same manner as the classified road network by using the SCANNER survey. The

alternative Detailed Video Survey method is used to measure road condition across both the classified and unclassified road network. It is proposed therefore to use the Detailed Video Survey results for measuring the condition of moss roads.

The Transport Asset Management Plan is currently being reviewed as phase 1 nears completion, and as part of that review it is proposed to present various standards for the unclassified road network to Cabinet for approval. In addition it is also proposed that the various standards for moss roads would also be presented.

5 - Prioritising works

Programme of works will be based on ranking proposed schemes based on the principles set out in the TAMP (2014). In prioritising works, account will be taken of the moss roads hierarchy category, road condition, the number of defects, claims and complaints received.

A whole life cost approach, as described in the Carriageway Life Cycle Plan approved by the Cabinet Member for Highways and Transport in March 2017, ensures that consideration is given to the maintenance requirements throughout the asset's lifecycle. Alternative maintenance strategies can be evaluated in terms of future cost and asset performance.

6 - Measures on moss roads not yet able to access capital funding:

For those moss roads that require capital works but for which it is not yet possible to programme works due to their priority ranking, the county council will ensure that the public, subject to them taking appropriate care, are kept safe by erecting warning signs, introducing access only Traffic Regulation Orders where necessary, or by temporary road closures. Moss roads will still be subject to the Highway Safety Inspection Policy, as approved by Cabinet in April 2018, and defects made safe or repaired in accordance with this policy.