Footway, Footpath, Cycleway and Cycletrack Lifecycle Plan (Metalled)

Introduction

- The background to lifecycle plans, and the format of each, are described in Section 5 of the HAMP. This appendix provides the lifecycle plan for footways, footpaths, cycleways and cycletracks that have hard surfaces (metalled). At this stage of development of the TAMP, footways are taken to exclude non-metalled public rights of way.
- 2. The condition of footways will be determined using Footway Network Surveys (FNS). These surveys are nationally recognised and will provide information for asset management and valuation purposes. A full survey will be undertaken in 2012 across West Berkshire.

Footways are defined in categories 1 to 4 as detailed in Table 1 below.

Table 1

Category	Category Name	Description
1	Primary Walking Route	Major town and village centres with +30 number shops.
2	Secondary Walking Route	Small retail shopping outlets +8 shops, large schools and industrial outlets +500 pupils or equivalent pedestrian movements.
3	Link Footways	Urban access, busy rural, all other schools.
4	Local Access Footways (metalled)	Rural footways, non-feeder footway in housing estates.

Notes:

Cycleways (those that form shared cycle/pedestrian thoroughfares on either the carriageway or footway)will be included as part of the carriageway/footway as detailed in Appendix A and B respectively.

Cycletrack (those that are remote from the carriageway/footway) will be treated as their own asset group.

Metalled Footpaths (those that are remote from the carriageway) will be treated as a Local Access Footway

Levels of Service

3. The desirable level of service for this asset category is set out in Table 2 overleaf.

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Table 2

Attribute	Desired Standard		Performance Measure	
Safety	Surface and profile should be safe for all users and free from obstruction.		Number of R1e and R1 defects. Accident record. Routine safety inspections.	
Availability	90% of footways available for use at all times.		User Surveys. ELM Reports.	
Serviceability	Category 1 and 2 footways to be clearly recognisable and signed as appropriate.		ELM Reports. Correspondence. Consultation.	
Condition	Primary Walking Route	5% in need of intervention *	Number of recorded defects. Footway Network Survey	
	Secondary Walking Route	9% in need of intervention *	(FNS) Data. Accident record.	
	Link Footways	12% in need of intervention *	ELM Reports.	
	Local Access Footways (metalled	15% in need of intervention *		

Notes.

- * The set Service levels are initial estimates that will be refined over the course of this HAMP with the collection of FNS survey data.
- 4. Failure to respond adequately to any of these four dimensions of level of service will produce risk to the authority. Table 3 below details the main risks and underlines the importance of responding properly to each.

Table 3

Risk Type	Description
Physical	Accidents caused by asset defects
Business	Legal proceedings for failure in duty of care
Financial	Reduction in asset value as a result of deteriorating condition; increased in settled claims and associated legal costs
Corporate Image	Poor condition of footways reflect on the overall image of the Council.
Network	Unnecessary disruption to users as a result of inadequate and unplanned maintenance.

Asset Base and Characteristics

5. A breakdown of the footway asset is shown in Table 4 below. The areas and types of construction are currently estimates, however, these will refined following the collection of the 2012 FNS data. All asset data will be stored and managed within in the Council's WDM UKPMS system.

Table 4

Description	km	Bituminous		Modular *	
		km	m2	km	m2
Primary Walking Route	11	3	5400 **	8	14400
Secondary Walking Route	18	11	19800 **	7	12600
Link Footways	246	246	442800 **	0	0
Local Access Footways	574	574	1033200 **	0	0
Remote Metalled Cycletracks	TBC	TBC	TBC	0	0

Notes

- * Modular covers flags and block paving. This data set will be refined to include separate data sets for flags, block and concrete on completion of the 2012 FNS.
- ** The areas shown are currently estimates based on Ordinance Survey data. This data set will be refined on completion of the 2012 FNS.
- 6. Following a full survey in 2012, Footway Network Surveys (FNS) will be carried out on a sample basis on each footway type in order for the purposes of asset management, programming and valuation. The sample coverage will be as detailed in Tabel 5 below.

Table 5

Description	Bituminous %	Flags %	Block %	Concrete %
Primary Walking Route	10	10	10	TBC
Secondary Walking Route	10	10	10	TBC
Link Footways	5	5	5	TBC
Local Access Footways	5	0	0	TBC
Remote Metalled Cycletracks	5	0	0	TBC

Asset Condition and Assessment

- 7. To assess the extent to which the desirable levels of service are met requires measurements covering the four dimensions of safety, availability, serviceability and condition. There are as yet no measures for availability and serviceability, and these will be considered further in the second edition of the HAMP.
- 8. The Council's standards for the frequency of footway inspections take into account national guidelines as detailed in the national Code of Practice for Maintenance Management "Well Maintained Highways" (July 2005) as detailed in Table 6 below.

Table 6

Category	Description	Frequency of Inspection
1	Primary walking route	Monthly
2	Secondary walking route	Every 3 months
3	Link footways	Every 6 months
4	All other metalled footways	Every 12 months

Asset Valuation

9. Currently the preset values as provided by HAMFIG have been used to calculate the value of the footway asset. The areas and unit rates will be developed and refined over the course of the HAMP as more detailed data is collected using FNS. Appendix E details the valuation and the initial gross replacement cost has been calculated to be £115 million.

Future Changes in Demand

10. A significant level of new development is planned in the District over the next ten years and this expansion will inevitably increase the length of the current carriageway and footway assets. This increase will, in the long term, present a maintenance expenditure pressure, however, in the short term, the rate of deterioration as a result of this increase in use is likely to be marginal.

Treatment Options and Costs

11. The limited number of types of footway construction, and ways in which they deteriorate, lead to a relatively short list of maintenance treatments. The frequency and use of these treatments are dictated by the category of the footway in question. In most instances category 1 and 2 footways require a higher level of maintenance to maintain the standards set out in the levels of service. Table 7 below summarises the list of maintenance treatments for footways.

Table 7

Treatment	Design Life (Years)	Unit Cost (£/m2)
Reactive Maintenance		
Bituminous (Patching etc)	5 -10	13.00
Blocked	10 *	25.00
Paved	10 *	20.00
Preventative Maintenance		
Bituminous (Slurry sealing)	8	1.40
Blocked	N/A	-
Paved	N/A	-
Renewal		
Bituminous(Resurfacing)	25	23.00
Blocked	30+	20.00
Paved	30+	17.00

^{*} Maintenance requirement in many locations is likely to be negligible, but where the underlying construction is damaged by heavy vehicle overrun, utility works etc., relaying may be required.

Linking Condition with Treatment, Scheme Identification and Prioritisation

12. On completion of the Footway Network Surveys, the data and the defined rules and parameters will be used to form a treatment matrix that will link condition with treatment. With this matrix, it will be possible to identify and prioritise treatments to ensure that the asset is maintained at minimum cost using the appropriate treatment. At present, footway condition is assessed using safety inspection and visual inspection data.

Lifecycle Action Plan

13. Please refer to Section 9 of the Highway Asset Management Plan.

Risks

14. The risks involved in implementing the lifecycle action plan have been assessed against the Council's standard grid of likelihood versus impact and are detailed in Tables 8 and 9 below, with an outline of the mitigation to be planned. The 'red' risks from each lifecycle plan are listed in Section 7 of the main TAMP document.

Table 8

	Extreme Impact - Rarely	Extreme Impact - Moderate	Extreme Impact - Likely	Extreme Impact - Almost certain
	4	8	12	16
	High Impact - Rarely	High Impact - Moderate	High Impact - Likely	High Impact - Almost certain
Impact	3	6	9	12
lmp	Medium Impact - Rarely	Medium Impact - Moderate	Medium Impact - Likely	Medium Impact - Almost certain
	2	4	6	8
	Low Impact - Rarely	Low Impact - Moderate	Low Impact - Likely	Low Impact - Almost certain
	1	2	3	4

Likelihood

Table 9

Ris	Risk		Mitigation	Responsible
1.	Insufficient staff resources.	6	Highlight in Service Plan Present Business Case for additional support	Head of Service, Service Managers
2	Insufficient national guidance and support	6		
4.	Materials/ labour/ plant/ staff costs	6	Ensure value fro money is being achieved	Project Managers, Contractors
5.	Reduced capital funding	12	Prioritise key assets to minimise overall deterioration whilst maintaining safety	
6.	Reduced revenue funding	12	Prioritise key assets to minimise overall deterioration whilst maintaining safety	