A safer, more sustainable and more resilient highway network



Appendix A

Summary of Asset Condition

Introduction

This Appendix summarises the current valuation, estimated backlog, current and steady state budget for each asset group, and includes key forecasts of asset condition over the next five years based on current levels of funding.

These figures are subject to revision as we develop our knowledge of our highway assets. In addition, if funding levels are significantly higher or lower than assumed, the condition forecasts will need to revised.

Valuation, backlog and current and steady state budgets

Asset Group	Valuation (£ million)	Estimated backlog (£ million)	Current annual budget (£ million)	Annual steady state budget (£ million)	
Roads	£6,400	£464	£45	£50.3	
Footways and Cycle Tracks	£1,200	£102	£3.5	£7	
Drainage	£3,700	£40.2	£4.5	£23.8	
Structures including Tunnels	£1,300	£20	£4.5	£5	
Crash Barriers	£61	£11.3	£1	£1.5	
Street Lighting	£175	£6.9	£3.5	£4.5	
Intelligent Traffic Systems (ITS)	£54	£4.2	£0.7	£3.3	
Soft Landscape	see notes				
Signs & Lines	£42	see notes	£0.8	£2	
TOTAL		£648.6	£63.5	£97.4	

Notes:

All figures are rounded to the nearest £0.1 million.

Valuation: taken from the 2019/20 valuation prepared for Whole of Government Accounts.

Estimated backlog: an estimate of the one-off cost of bringing all assets into a good or acceptable condition.

Current annual budget: the core capital budget for 2020/21, not including revenue funding or additional capital funding awarded over one or more years through internal or external bidding processes.

Annual steady state budget: an estimate of the annual budget needed to maintain all assets in their current condition, without further deterioration but without reducing the current backlog.

Roads: the current annual budget figure includes an allowance for Pothole Blitz funding, which for every £10m of spend is estimated to deliver improvements approximately equivalent to £5.0-7.5 million of planned maintenance.

Structures including Tunnels: the backlog figure is understood to be a considerable underestimate and is currently being reviewed. No separate capital budget is provided for tunnel assets: their routine maintenance is funded from revenue budgets, with structural repairs and the replacement of equipment funded through the capital bidding process.

Crash Barriers: the backlog figure represents the forecast backlog as of 2030 given current levels of funding including additional capital funding allocated for 2020-2023.

Soft Landscape: the value of this asset is not included in the Whole of Government Accounts valuation, and its maintenance is funded from revenue budgets.

Signs & Lines: we do not have a current estimate of the backlog value, but are working to develop our knowledge and understanding of this asset.

Budget allocation

Budgets are allocated based on a number of interrelated factors, including those set out in the above table (asset value, the relative size of backlogs and steady state funding levels). This includes:

- whether assets are considered critical assets on Kent's Resilient Highway Network
- where assets in poor condition are more likely to adversely affect the condition of other assets
- the potential of asset groups, if in poor condition, to disproportionately affect those protected under the Equality Act
- asset groups in which the majority of maintenance spend is revenue
- asset groups that are especially safety critical if failure occurs

The table below illustrates this analysis.

Asset Group	RHN Critical	Affects other assets	Equality Act	Revenue Activity	Safety Critical
Roads	Y	Y			
Footways and Cycle Tracks			Υ		
Drainage	Y	Y		Υ	
Structures including Tunnels	Y				
Crash Barriers					Y
Street Lighting					
Intelligent Traffic Systems (ITS)			Y		
Soft Landscape		Y		Υ	
Signs & Lines					

Asset condition over the next five years based on current levels of funding

Asset Group	Condition Band	2021	2025	
Roads	% classified A roads in 'red' condition ¹	3.8	5.2	
	% classified B&C roads in 'red' condition ¹	4.5	6.6	
	% unclassified roads in 'red' condition ¹	17.3	18.0	
Footways	% footway assets in very poor condition	21.6	25.4	
Cycle Tracks	No relevant data currently available			
Drainage	% drainage gullies in very poor condition ³	0.5	1.9	
	% soakaways in very poor condition	5.0	13.3	
	% ponds/lagoons in very poor condition	4.0	41.8	
	% pumping stations in very poor condition	0.0	9.7	
	% small culverts in very poor condition	10.0	17.8	
Structures	% structures in very good condition	66	53	
	% structures in good condition	25	35	
	% structures in fair condition	7	10	
	% structures in poor condition	1	1	
	% structures in very poor condition	0	0	
Crash Barriers	% crash barriers in very good condition	27	35	
	% crash barriers in good condition	11	14	
	% crash barriers in fair condition	49	29	
	% crash barriers in poor condition	12	21	
	% crash barriers in very poor condition	0	1	
Tunnels	No relevant data currently available			
Street Lighting	% street lighting assets in poor condition ⁴	<1	<1	
Intelligent Traffic Systems (ITS)	% ITS assets beyond expected life	8	26	
Soft Landscape	No relevant data currently available			
Signs & Lines	% unlit signs and pedestrian guard railing in 'life expired' condition	30.5	41.2	

¹ Based on Road Condition Index (RCI): red = roads in poor overall condition and likely to require maintenance within the next twelve months

² Other drainage assets (pipework and chambers) show similar condition and deterioration levels

³ For safety reasons, street lighting assets in poor condition are either replaced or removed