

Cabinet

10 July 2019

**Transport Asset Management Plan -
Annual Update**

Ordinary Decision



Report of Corporate Management Team

Ian Thompson, Corporate Director of Regeneration and Local Services

Councillor Brian Stephens, Cabinet Portfolio Holder for Neighbourhoods and Local Partnerships

Electoral division(s) affected:

Countywide.

Purpose of the Report

- 1 To provide Cabinet with an annual update on the Transport Asset Management Plan (TAMP).

Executive summary

- 2 The adopted highway is the Council's largest and highest value asset. The TAMP sets out the long term plan for managing the highway asset so that the condition is maximised for the available budget. The report highlights the substantial investment by the council which has contributed to the reduction in the maintenance backlog over the past year.

Recommendations

- 3 It is recommended that Cabinet:
 - (a) Approves the annual update report; and
 - (b) Notes the substantial investment in programmed capital maintenance and the ongoing work to maximise funding going forward.

Background

- 4 The adopted highway network is the Council's largest and highest value asset. Across the county it includes 3,792 kilometres of carriageway, 489 road bridges and 83,676 street columns. It is used every day by nearly all County Durham residents and businesses together with many visitors. The highway network is therefore fundamental to economic and social activity in County Durham.
- 5 The asset is of course in a continual process of change. Not only is the infrastructure ageing, bringing with it demands for maintenance and capital improvement, but the inventory also grows with new developments. With finite resources, it is vital to ensure that investment is well directed to ensure a safe, serviceable and sustainable highway network. This approach helps maximise the condition of the highway for the available budget.
- 6 A TAMP is a key tool in delivering this. It provides an opportunity to systematically understand the condition of the highway asset, and to establish policy and priorities regarding investment. It applies a whole life cost approach and considers the asset in the long term.
- 7 The TAMP for Durham County Council has been developed to achieve the following best practice standards:
 - British Standard BS ISO 55001:2014 Asset Management. The council was the first council in the UK to achieve this accreditation in 2015;
 - The Chartered Institute of Public Finance & Accountancy (CIPFA) - Code of Practice on Transport Infrastructure Assets; and
 - Highways Maintenance Efficiency Programme (HMEP) - Highway Infrastructure Asset Management Guidance Document.
- 8 Throughout the country there are more demands on highways than there are resources to maintain and improve them. Indeed the Annual Local Authority Road Maintenance (ALARM) Survey 2018 estimates the backlog for England and Wales at £9.31 billion for carriageways and footways. Having a TAMP does however put the Council in a good position for establishing a clear case for investment, particularly from the Department for Transport.

Key Findings of the TAMP

- 9 The TAMP is set out in full in Appendix 2 and 3. It is divided into two separate sections; section one being the policy which set out the principles of TAMP and section two being an annual update report.

Condition

- 10 The condition of A, B and C principal roads have improved in recent years and are close to the national average. This reflects that the council has prioritised budgets at maintaining principal roads which have the highest usage.
- 11 Structures are generally in 'good to fair' condition and the backlog has now stabilised after increasing in recent years due to updated and more accurate condition surveys.
- 12 The key issues are:
- unclassified roads: the condition is below the national average and the condition has deteriorated due to the severe winter of 2017/18. However, there is an on-going programme of resurfacing works is in place;
 - footways: a high proportion requires resurfacing. However, there has been an improvement over the past 4 years and there is an on-going programme of resurfacing works is in place; and
 - street lighting columns: a significant number of columns have reached the end of their service life. There is an on-going column replacement programme in place.

Maintenance Backlog

- 13 The maintenance backlog is the value of maintenance required to bring the entire highway asset up to good condition. Good condition represents where the maintenance backlog will be zero with no defects. This is an ideal theoretical target which is not realistic in practice and therefore nearly every Highway Authority has a significant maintenance backlog.
- 14 The maintenance backlog as at 31 March 2018 is summarised as follows:

Maintenance Backlog	£Millions 31 March						
	2012	2013	2014	2015	2016	2017	2018
Carriageways	67.5	67.7	66.8	59.2	57.3	52.8	52.7
Footways	48.1	48.4	47.0	47.7	47.5	44.8	40.5
Street Lighting	24.8	25.6	23.3	23.5	22.1	19.2	17.1
Structures	9.9	9.9	9.9	22.4	36.0	42.0	40.6
Traffic Management	1.1	1.1	1.1	1.0	1.0	1.0	1.0
Kerbing	18.1	18.2	20.2	18.4	18.5	18.5	18.5

Drainage	5.4	5.4	5.8	5.6	5.6	5.6	5.6
Road Markings	0.8	0.8	0.5	0.9	0.9	0.9	0.9
Street Furniture	2.3	2.5	2.4	2.4	2.8	2.8	2.8
Total	178.0	179.6	177.0	181.1	191.7	187.6	179.7

- 15 As can be seen from the above, the maintenance backlog in relation to carriageways, footways and street lighting has reduced since 2012.
- 16 The Council's maintenance backlog is broadly in line with other councils on average taking into account the size of the highway network.

Investment Levels – Council and Department for Transport Funding

- 17 Despite unprecedented reductions in government funding since 2010, the Council has protected and continued to prioritise investment in programmed capital maintenance. Indeed funding has steadily risen - the Council's contribution to programmed capital maintenance in 2010/11 was £0.7 million, however, this has increased to £7.5 million in 2018/19.
- 18 Following the severe winter of 2017/18 which has led to an increase in potholes the Council agreed to invest a further £0.7 million in resurfacing of unclassified roads.
- 19 The DfT provides the majority of the funding for programmed capital maintenance. In 2018/19 this is £11.9 million. This funding is not ring-fenced but the Council has always allocated it fully to highway maintenance and every opportunity is taken to secure additional funding.
- 20 The Council has achieved the maximum Band 3 efficiency rating under the DfT's Incentive Fund which was introduced in 2016. Durham was one of only two Highway Authorities to achieve this maximum efficiency rating out of 119 participating Highway Authorities in England in 2016 and has maintained the maximum Band 3 efficiency rating in 2019. This rating will help ensure the Council maximises funding from the DfT's Incentive Fund going forward.
- 21 The TAMP measures the current and projected condition of the highway asset for a given level of investment in programmed capital maintenance. A range of investment levels (condition or budget led) are provided to allow stakeholders to select the most appropriate investment level to meet their objectives.
- 22 The key investment levels are summarised below:

Investment Level – Programmed Capital Maintenance	1 April 2017 Prices (£ millions)		
	One Off Capital Cost	Annual Average Capital Cost	Annual Average Capital Cost (Once Backlog Cleared)
Projected Budget	N/A	£17.8	N/A
Steady State Condition	N/A	£21.7	N/A
Eliminate highway maintenance backlog over 1 year then maintain at steady state condition	£179.7	N/A	£21.5
Eliminate highway maintenance backlog over 30 years then maintain at steady state condition	N/A	£32.1	£21.5

- 23 The Projected Budget is an indicative annualised figure of the expected budget and the actual budget may be greater or less depending upon DfT and council funding. The total budget for programmed capital maintenance in 2017/18 was £24.0 million.
- 24 The steady state condition investment level is where the budget is set to keep the current condition constant after allowing for annual average deterioration. The steady state condition investment level is calculated using nationally accredited lifecycle planning models which are based on current condition projected forward for average annual deterioration over a period of 30 years.
- 25 In the short term the annual movements in the maintenance backlog are affected by inflation, annual variations in deterioration due to the severity of the weather, cycle for collecting condition data which is up to 6 years and the accuracy of the nationally accredited deterioration model when applied to County Durham. Therefore, the annual movements in the maintenance backlog in paragraph 14 do not necessarily reconcile to the investment levels above.
- 26 Current investment levels, including those over the last few years and those projected over the next few years are allowing the maintenance backlog to be broadly stable, and indeed condition improvements across several highway categories through a process of prioritisation. This will however get more challenging in the longer term, as the asset ages further. The financial climate at this time may be better or worse, but there will be a continued strong case for investment.

Complementary Work to the TAMP

- 27 The Council has led the development and implementation of the North East Highways Alliance which was formally established in September 2013. This is a forum for collaborative working for all 12 north east councils. The North East Highways Alliance has delivered a number of initiatives that are helping all councils involved, including Durham, maximise efficiencies in highways through sharing resources, collaborative procurement and knowledge sharing.
- 28 This partnership working together with on-going collaborative working of our in-house Highway Services team with our supply chain of competitively procured external sub-contractors has led to the Council being one of the first in the UK to be awarded British Standard BS11000 – Collaborative Business Relationships. This again will assist in maximising funding from the DfT.
- 29 In addition to the TAMP the Council has a Highway Maintenance Plan (HMP) which sets out the Council’s service levels for inspections, reactive maintenance and routine maintenance in accordance with national codes of practice. This includes the highway safety inspection regime which helps ensure that the adopted highway throughout the county is maintained in a safe condition as far as reasonably practicable.

Plastic Roads

- 30 The Council has been working in partnership with Rainton Construction and MacRebur on trialling plastic roads. The following roads were resurfaced in 2018 with plastic content:

Scheme	Surfacing Treatment	Surfacing Metres 2	Tonnes of Plastic Waste	Equivalent Plastic Bags (Millions)	Binder Plastic Content %
A689 Sedgefield	Hot Rolled Asphalt	12,744	6.5	1.6	6%
Murton	AC 10 DSC	3,413	1.1	0.3	6%
A68 Toft Hill	Hot Rolled Asphalt	6,320	3.7	0.9	6%
Total	-	22,477	11.3	2.8	6%

- 31 Plastic content is included in the majority of resurfacing schemes already undertaken or planned for 2019.
- 32 The Council continues to review opportunities for further improvement and innovation including the use of new materials. These were the first trials in the North East and the largest undertaken nationally at the time.

- 33 The further plastic road schemes undertaken so far in 2019 mean that Durham have used approximately 100 tonnes of plastic in our roads to date which means that Durham has the largest amount of plastic roads in the UK.
- 34 Using plastic in roads reduces the amount of bitumen required in the binder. The benefits of this are:
- provide an outlet for single use plastic that would otherwise be sent to landfill or incinerated; and
 - reduces the amount of bitumen required which reduces fossil fuels and carbon emissions.
- 35 The plastic roads trial has attracted a lot of interest and support from Members and the public.

Conclusion

- 36 Like most Highway Authorities, the Council has a highways maintenance backlog and faces considerable challenges to maintain the condition of the highway network. However, the TAMP demonstrates that work is progressing well in helping to maximise the condition of the highway for the available budget.
- 37 The Council has been steadily increasing its own investment and has also been proactive in attracting considerable funding from DfT. This TAMP together with the top efficiency rating will ensure that it is well placed to maximise the much needed funding from the DfT going forward.

Appendices

- Appendix 1: Implications
- Appendix 2: Transport Asset Management Plan - Section 1 – Policy
- Appendix 3: Transport Asset Management Plan - Section 2 - Annual Update Report 2018

Background papers

- British Standard BS ISO 55001:2014 Asset Management
- The Chartered Institute of Public Finance & Accountancy (CIPFA) - Code of Practice on Transport Infrastructure Assets

- Highways Maintenance Efficiency Programme (HMEP) - Highway Infrastructure Asset Management Guidance Document
- Transport Asset Management Plan – Annual Update, Cabinet Report dated 6 April 2016
- Transport Asset Management Plan – Annual Update, Cabinet Report dated 20 June 2017
- Transport Asset Management Plan – Annual Update, Cabinet Report dated 12 September 2018

Other useful documents

- None.

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Appendix 1: Implications

Legal Implications

The Highways Act 1980 sets out the main duties of the Local Highway Authority in respect of highways maintenance. In particular, Section 41 imposes a duty to maintain the adopted highway at public expense. The Highways Act does not specify the level of maintenance although national Codes of Practice offer guidance in line with best practice.

Finance

The TAMP informs the capital bids for programmed capital maintenance. The TAMP also provides the methodology for prioritising the programmed capital maintenance budget.

Consultation

None.

Equality and Diversity / Public Sector Equality Duty

None.

Human Rights

None.

Crime and Disorder

Street lighting helps reduce the fear of crime.

Staffing

Highway maintenance is delivered by the Council's in-house provider, Highway Services, who are supported by an extensive supply chain of competitively procured external sub-contractors.

Accommodation

None.

Risk

The investment level in programmed capital maintenance directly affects the condition of the highway asset, maintenance backlog, number of defects, number of public liability claims and public satisfaction.

Procurement

Highway maintenance is delivered by the Council's in-house provider, Highway Services, who are supported by an extensive supply chain of competitively procured external sub-contractors.