

From: **Matthew Balfour, Cabinet Member for Environment and Transport**

Roger Wilkin, Interim Director of Highways, Transportation and Waste

To: **Environment & Transport Cabinet Committee – 13 January 2016**

Subject: **The approach to maintaining our highway assets**

Classification: **Unrestricted**

Pathway: **NA**

Future Pathway: **Environment & Transport Cabinet Committee – July 2016**

Electoral Division: **All**

Summary: This report updates Members on our approach to maintaining our highway assets and highlights the challenges faced by the County Council going forward.

Recommendations: It is recommended that the Cabinet Committee note the challenges highlighted in this report and support further embedding of asset management principles in our approach highways maintenance.

It is also recommended that a Member Task and Finish Group is established to support the development of our approach to highway asset management in Kent.

1. Introduction

- 1.1. The County Council is responsible for the maintenance of 8,700km of roads and associated assets. These assets include 5,000km of footway, 250,000 roadside drains, 120,000 street lights, 2,700 highway structures and 500,000 trees. We have legal obligations to maintain the public highway in a safe condition and facilitate the movement of traffic around the County.
- 1.2. Our highway assets are estimated to be worth £11.5bn (excluding land value) making them one of the County Council's most valuable assets. The highway network provides a key strategic link between the Capital and mainland Europe and is the only alternative for motorists when the County's motorways are closed due to roads works, incidents or Operation Stack.
- 1.3. In recent years our approach to maintaining and improving highway assets has been driven by the ever increasing need to make savings against a back drop of

high customer expectations and aging infrastructure. This has made us reactive in the way we work, “patching up” deterioration and responding to asset failures instead of utilising our asset knowledge and forward planning to take a more long term approach.

- 1.4. The rate at which our highway assets are deteriorating far exceeds the rate of investment and the Countywide maintenance backlog for our roads alone is estimated to be in excess of £200m. This excludes unfunded emergencies such as the road collapse in Leeds in 2013 which can run into millions of pounds each year.
- 1.5. Changes to DfT funding rules have brought asset management to the fore. In 2016/17 a phased implementation of the Incentive Fund will commence. By 2020/21, a little over 15% of the County Council’s Capital Maintenance Grant will be dependent on the Authority being able to demonstrate that we are practicing good asset management.
- 1.6. Further savings are needed from both the capital and revenue budgets. Reactive maintenance will always be necessary but in future, we need to take a more balanced, long term approach, managing the network more efficiently and effectively now and for future generations.

2. Financial Implications

- 2.1. In 2015/16, the total base budget for carriageways & footways, bridges & structures, street lighting, drainage, soft landscaping and traffic systems is £55,422,000. This figure includes the associated budgets for staff, supplies, services and asset related services such as winter service and traffic management required to facilitate works. The base budget is funded from capital and revenue; £28,760,000 is revenue funded and £26,662,000 is capital funded.
- 2.2. This report highlights the current maintenance backlog and the continuing shortfall in budget needed to maintain the County’s highway assets in their current condition.

3. Policy Framework

- 3.1. By further embedding asset management principles in our approach to maintaining highway assets we will be supporting the County Council’s Strategic Outcomes outlined in “Increasing Opportunities, Improving Outcomes”.

4. The Detail

4.1. Each year, Highways, Transportation and Waste receive over 100,000 enquiries from members of the public, local councils, partners and elected representatives. 74% of the enquiries received relate to assets on or adjacent to the highway. For example, each year we receive around 20,000 enquiries about street lights, 15,500 enquiries about potholes and 9,500 enquiries about highway drainage.

4.2. Our approach to maintaining highway assets comprises of planned maintenance and reactive repairs:

4.2.1. Planned Maintenance

Every year we deliver programmes of planned repairs and renewals which include resurfacing, installation of new drainage systems and street lighting column replacements. Sites are identified from information taken from inspections, technical surveys and enquiries raised by our customers and partners. We do not have sufficient budget to deliver all of the works identified so sites are prioritised and delivered on the basis of the risk to highway safety.

4.2.2. Reactive Maintenance

We also carry out reactive maintenance and minor repairs which include pothole repairs, drainage cleansing, grass cutting and bridge painting. This work is carried out in response to customer enquiries and defects raised by our teams of inspectors. Works are prioritised on the basis of the risk to safety and routine works are usually completed within 28 days. According to the annual Tracker Survey, overall customer satisfaction with the service has remained relatively consistent over the past four years. Nevertheless the current approach is not sustainable in the long term. Customer demand is continuing to grow, volumes of traffic, including HGV traffic are increasing, weather events are occurring more frequently, the condition of the highway network and associated assets is deteriorating rapidly and budgets are being squeezed. In addition changes in the way DfT allocate funding are providing a driver for authorities to move away from inefficient reactive maintenance towards adopting a more proactive longer term approach.

4.3. The condition of highway assets in Kent is assessed using data gathered from customer enquiries, routine works reports and a range survey regimes:

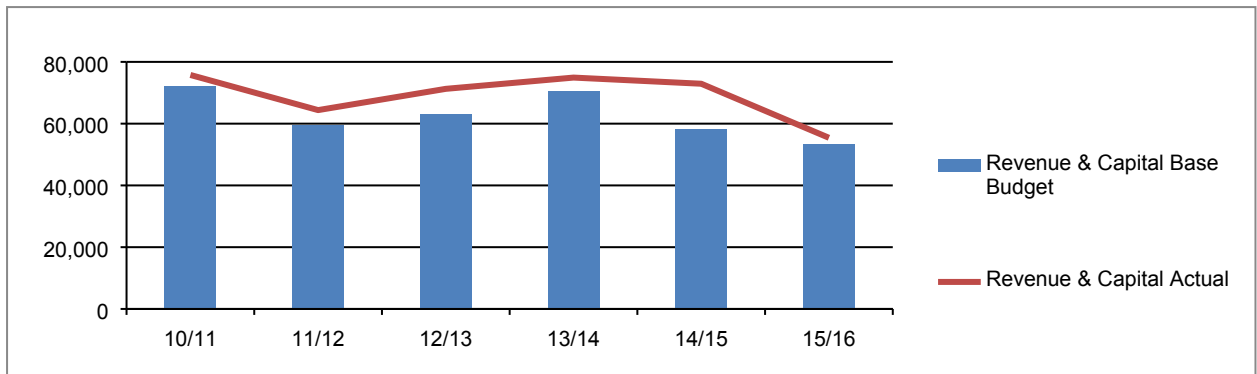
→ Visual highway safety inspections are carried out by our team of Highway Inspectors weekly, monthly, twice yearly or annually in accordance with our Highway Inspections Manual.

- Machine-based SCANNER surveys are carried out on A, B and C roads annually or every other year depending on the classification of the road.
- Visual condition surveys (known as CVI – Coarse Visual Inspection) are carried out on unclassified roads every two years.
- SCRIM surveys, which measure the skid resistance of the road surface, are carried out on the A and B roads annually.
- Footway Maintenance Survey (FMS) are undertaken every two year on all footways.
- Structural testing of streetlights is carried out at no more than 12 yearly intervals.
- Electrical testing of streetlights is carried out every 6 years.
- Highway structures are subject to a range of inspections ranging from general inspection every two years to more detailed principle inspections every 12 years.

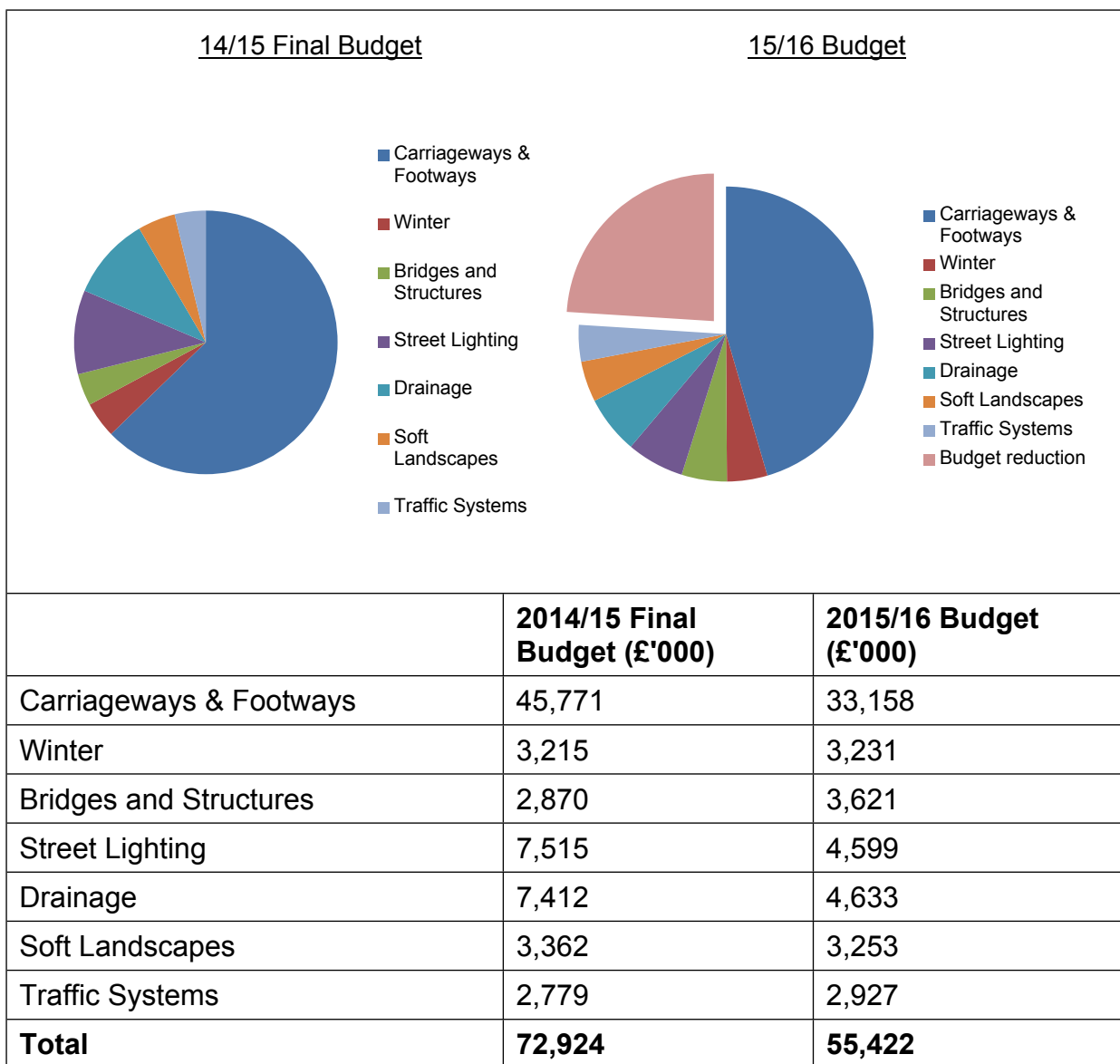
4.4. On the basis of the latest condition data, the backlog of road maintenance alone comprises of over 5,250 sites and is valued at over £200m. If the current levels of investment are maintained, this backlog is expected to increase to around £370m over the next 10 years. However, at present the current level of investment is expected to decrease.

4.5. In recent years, highway budget reductions have been masked by additional funding from the Department for Transport. The cumulative budget reduction for all highway maintenance comparing 14/15 with 15/16 is a highly significant reduction of 24% or £17.5m. The reduction includes the removal of one off funding to the value of £14.7m. This funding has meant the full impact of DfT base budget cuts and KCC led savings initiatives has not fully resonated at a time when demands on the service, and our highways network, is at an all-time high.

4.6. Highway Maintenance Combined Revenue and Capital Budget



4.7 A comparison of the 2014/15 and 2015/16 budget allocations illustrates the impacts of this budget reduction:



4.8 It should be noted that the values above do not equate to the budget for physical works delivered. All budgets include the associated cost for staff, supplies and

services. They also encompass the budget for associated works; for example the roads and footways budget includes the budgets for signs, lining, crash barrier maintenance and traffic management to facilitate the works.

- 4.9 A certain amount of reactive maintenance will always be necessary to deal with unforeseen safety critical defects however on the whole, it is inefficient and costly. Given the challenges outlined above, we need to consider the most effective and efficient way of managing and maintaining our roads and footways not only now but for future generations to come.
- 4.10 Asset Management provides an alternative to our largely reactive service provision. It is a common sense approach to maintenance and investment decisions and involves using knowledge and forward planning to manage the highway network effectively and efficiently. Asset Management enables the delivery of services shaped by the needs of customers now and in the future; promotes a focus on best use of resource to meet legal obligations and embeds greater resilience.
- 4.11 To manage our assets effectively we need to understand them. We need to know what they are, where they are and whether or not they are doing what we need them to do to keep the highway safe, reliable and meet the needs of our customers. We already have a considerable amount of information about our assets which is routinely updated as we carry out routine maintenance, repairs and improvements.
- 4.12 All of our assets are created, maintained and eventually repaired, replaced or removed. We need to understand what is involved at each stage, when it needs to happen and how much it costs. By understanding the life cycle of our assets we can predict the impact of different maintenance strategies and determine whether or not we can afford them.
- 4.13 If we understand our assets, know whether or not they are doing what we need them to do and are able to forecast the impact of different maintenance strategies we can set informed levels of service that are best suited to meeting the needs of our customers now and in the future.
- 4.14 Given the ever increasing financial constraints, it is also important to identify the most efficient and affordable way of delivering services.
 - When considering different maintenance strategies it is important to think about the future and keep costs to a minimum for the whole life of the asset. For example repairing potholes might be cheaper than surface dressing a road in the short term but not if it means that the road needs to be reconstructed and resurfaced in five years' time.

- We need to understand and document the risks associated with different maintenance strategies and manage them effectively. For example, increasing the intervention level for a pot hole from 50mm to 100mm will save money but increase the safety risk to an unacceptable level. This approach in real terms only delays the inevitable i.e. there will be a pothole to repair at some point, it will be deeper and more costly and customer perception will be that the roads are deteriorating to a greater extent.
- Where it is not financially viable to enhance the level of service across all assets key areas of the service should be prioritised. For example the frequency of maintenance on main roads might be increased whilst the current frequency is maintained or reduced on minor roads.

4.15 Asset Management has been widely accepted by central and local government as the way forward in highway service provision. It forms the basis for two of the recommendations in the draft code of practice “Well Managed Highway Infrastructure” and underpins a proportion of the DfT Capital maintenance grant. The full Capital maintenance block grant now has three components:

- Needs based grant, based upon wider asset volumes, network length plus cycle lanes, this is fixed.
- Incentive formula, award by DfT following an assessment conducted by DfT of how efficiently Highways and Transportation operates, and whether it follows asset management principles including lifecycle planning.
- Challenge fund, which relies upon the Highways and Transportation bidding for funding over two tranches, lasting three years. Two schemes – one from in from £5m - £20m and another of £20m+. In 2015 we were unsuccessful in our bid for Challenge funding and will not have the opportunity to submit another bid for three years

4.16 The following table details the Funding model summary for English Local Authorities;

Year	Needs formula	Incentive formula	Challenge Fund	Total
2015/16	£901m	£0m	£75m	£976m
%	92.3%	0.0%	7.7%	100%
2016/17	£826m	£50m	£100m	£976m
%	84.6%	5.1%	10.2%	100%
2017/18	£801m	£75m	£100m	£976m

Year	Needs formula	Incentive formula	Challenge Fund	Total
%	82.1%	7.7%	10.2%	100%
2018/19	£725m	£151m	£100m	£976m
%	74.3%	15.5%	10.2%	100%
2019/20	£725m	£151m	£100m	£976m
%	74.3%	15.5%	10.2%	100%
2020/21	£725m	£151m	£100m	£976m
%	74.3%	15.5%	10.2%	100%
Total	£4.7bn	£578m	£575m	£5.8bn

- 4.17 The Incentive element of funding will be introduced from 2016/17. Local Authorities will be required to carry out a self-assessment which will culminate in an overall score of 1 to 3. The completed assessment will then be submitted to DfT with details of supporting evidence. The score achieved will determine the level of funding received. If we fail to demonstrate sufficient commitment to efficiency and asset management to score a 3 the financial risk to KCC is nearly £13m over 5 years.

Year	Total needs/formula allocation (£)*	Indicative incentive element by “band” of self-assessment ranking (£)			Cost of not being in Band 3
		Band 3	Band 2	Band 1	
2015/16		No incentive allocation in 2015/16			
2016/17	£25,006,000	£1,514,000	£1,514,000	£1,362,000	£152,000
2017/18	£24,249,000	£2,271,000	£2,043,000	£1,362,000	£909,00
2018/19	£21,949,000	£4,571,000	£3,200,000	£1,371,000	£3,200,000
2019/20	£21,949,000	£4,571,000	£2,286,000	£457,000	£4,114,000
2020/21	£21,949,000	£4,571,000	£1,371,000	£0	£4,571,000
Total cost of not being in Band 3:					£12,946,000

*announced in December 2014

- 4.18 During a dry run of the Incentive Fund Questionnaire we assessed service delivery in relation to 22 questions covering asset management, resilience, customers, operational delivery, benchmarking and efficiency. Whilst we scored highly in a number of areas such as resilience and customer service, our scores for the asset management questions were comparatively low and in places we were on the borderline of Band 1 and Band 2.
- 4.19 Our score for the asset management is a particular concern as the DfT guidance states that if an Authority scores a Level 1 in any or all of the three questions relating to Asset Management Policy and Strategy, Communications or Lifecycle Planning they will automatically be placed in Band 1 overall, regardless of their other scores. With this in mind we have assessed the work needed to ultimately

achieve a “Band 3” score for the asset management questions. In doing so we have developed a document outlining our approach to asset management and the actions we will take to further enhance the way we work; this document can be found at Appendix A. Completing the actions outlined in this document will significantly improve our ability to achieve a Band 3 score.

5. Conclusion

- 5.1. Despite the County Councils investment in previous years our highway assets are continuing to deteriorate, an ever increasing number of repairs, renewals and improvements are required and further investment is urgently needed.
- 5.2. As funding continues to be reduced it is vital that we invest the budget we have in the most efficient and effective way we can for the benefit of our customers now and in the future. Moreover we need to be mindful of the requirements that will underpin funding allocation in the future.
- 5.3. Some reactive repairs will always be necessary however moving away from a reactive approach and further embedding asset management principles will enable us to make informed decisions about where the need for investment is greatest and preserve the highway network for the benefit of residents, communities and businesses now and in the future.
- 5.4. It is proposed that a Member Task and Finish Group is established to support the development of our approach to highway asset management in Kent.
- 5.5. A subsequent report with recommendations for decision will be presented to the Cabinet Committee for decision in July 2016 prior to any public consultation, should it be required.

6. Recommendations

Recommendations: It is recommended that the Cabinet Committee note the challenges highlighted in this report and support further embedding of asset management principles in our approach to highways maintenance.

It is also recommended that a Member Task and Finish Group is established to support the development of our approach to highway asset management in Kent.

7. Background documents

Appendix A: Asset Management in Highways

8. Contact Details

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