

REPORT TO: Policy and Performance Review Committee

MEETING DATE: 12 June 2012

BY: Executive Director (Services for Communities)

SUBJECT: Road Asset Management Plan 2012 -
Carriageway Annual Status and options Report

1 PURPOSE

1.1 To update the Panel on the current condition of the Councils adopted public road network carriageway asset group as at April 2012. The report describes the current condition of the carriageway asset; detail of the level of service that the asset currently receives; the range of activities being employed; and present spend options available for the future.

2 RECOMMENDATIONS

2.1 To note the condition of the carriageway asset; the predicted impact of current spending levels; the long term cost in maintaining the asset; and the options available going forward.

3 BACKGROUND

3.1 This report discusses the carriageway group only. Asset groups are presented in accordance with the CIPFA (Chartered Institute of Public Finance and Accounting) Transport Asset Code for finance reporting. The detail of other asset groups will be reported separately in due course. The carriageway group has a significant value, such that the overall GRC (Gross Replacement Cost) is £750 million. (Table 1 – Depreciated Replacement Cost [DRC])

3.2 Road assets deteriorate slowly and it is not possible to determine the impact of the level of investment by looking over the short term. The report therefore examines 20 year forecasts to ensure that decisions are taken with an understanding for the long term implications.

Measures to improve the accuracy of the information use to predict condition are ongoing with yearly SCANNER data collection and refinements in pavement performance data. Treatment life expectancy varies widely and is hugely influenced by drainage, substandard historic construction, use, traffic volumes and loading. Interventions are planned throughout the lifecycle of the asset using treatment Design Life (DL) of between 5 – 60 years. However, the ESL (Expected Service Life) for 80% of the network can be considered to be 30 years.

Table 1 – Depreciated Replacement Cost

Asset Group	Gross Replacement Cost (GRC) estimate £'000	GRC less Depreciation (DRC)	
		Depreciation £'000	DRC estimate £'000
carriageway	749,029	88,847	660,182
Footways + cycleways	52,994	18,024	34,970
structures	111,000		
Lighting	65,050	1607	63,443
Traffic Management	605	252	353
Street Furniture	5,093	3085	2,008
Land	298,821	na	298,821
Total	1,282,592	111,815	1,059,777

3.3 The East Lothian Public Road network length in 931 km, made up as follows:

Classification	Urban (km)	Rural (Km)	The asset has grown by 19.9km since 2003.
A	32.8	62.4	
B	35.4	134	
C	15.5	207.4	
U	244.9	198.5	

3.4 In August 2011 the value of the adopted public road network carriageway asset, Depreciated Replacement Cost was calculated at £660m. An annualised depreciation (AD) of £2.8m was calculated. This AD represents the predicted average carriageway depreciation in one year with no investment in asset renewal.

3.5 In 2011/12 £3.062m was invested in planned maintenance / renewals of the carriageway asset. This represents 110% of the estimated annual depreciation of £2.8m. The AD figure is an initial estimate and will be refined in coming years. Current investment levels are predicted to lead to increasing asset value, based upon the current levels of renewal. This is borne out by the continually improving Road Condition Indicator (RCI) for the East Lothian road network.

3.6 The condition of the carriageway network is recorded nationally through the Scottish Road Maintenance Condition Survey (SRMCS). The data collected is done so by a machine based survey (SCANNER), and the data is validated to a nationally agreed set of rules and parameters. Based on the results of 2010-12 RCI the Council is 5th out of the 32 Councils in Scotland when measured by network level RCI values:

Trend in the Road Condition Indicator (RCI) for East Lothian:

2008-09	2009-10	2009-11	2010-12
32.6	32.5	31.0	29.0

3.7 Existing investment levels on average reflect a renewal of carriageway every 38.7 years. This is significantly beyond the 30 years ESL, which is considered to be a reasonable return. However, this varies dramatically, between Urban / Rural and road classifications for 2011-12.

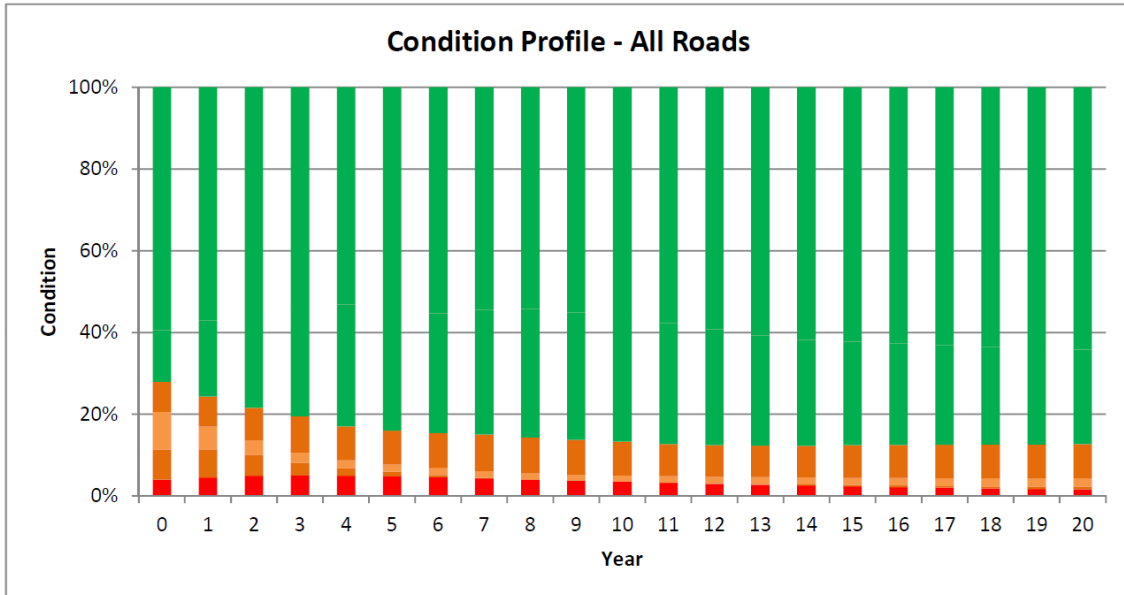
Classification	Urban (Yrs)	Rural (Yrs)
A	93	95
B	12.9	25.6
C	25.8	45.7
U	65.5	30.7

This however, does not take into account other preventative treatments or repairs which all influence the performance of the asset. Making realistic forecasts requires the application of various treatments to maximise the carriageway lifecycle taking into account whole life costs. Significant benefits can be realised by applying the correct treatment at the correct time, which is demonstrated through the annual surface dressing programme. A full breakdown of carriageway outputs for 2011-12 is shown in **Appendix A**.

3.8 Long term projections are based on estimated rates of deterioration. Estimates of expected service lives of the carriageway surface course on each classification of road have been used to predict how each class of road will deteriorate on average, over time. The predictions are based on average weather conditions and do not take into account a typically harsh winter, which have recently been experienced.

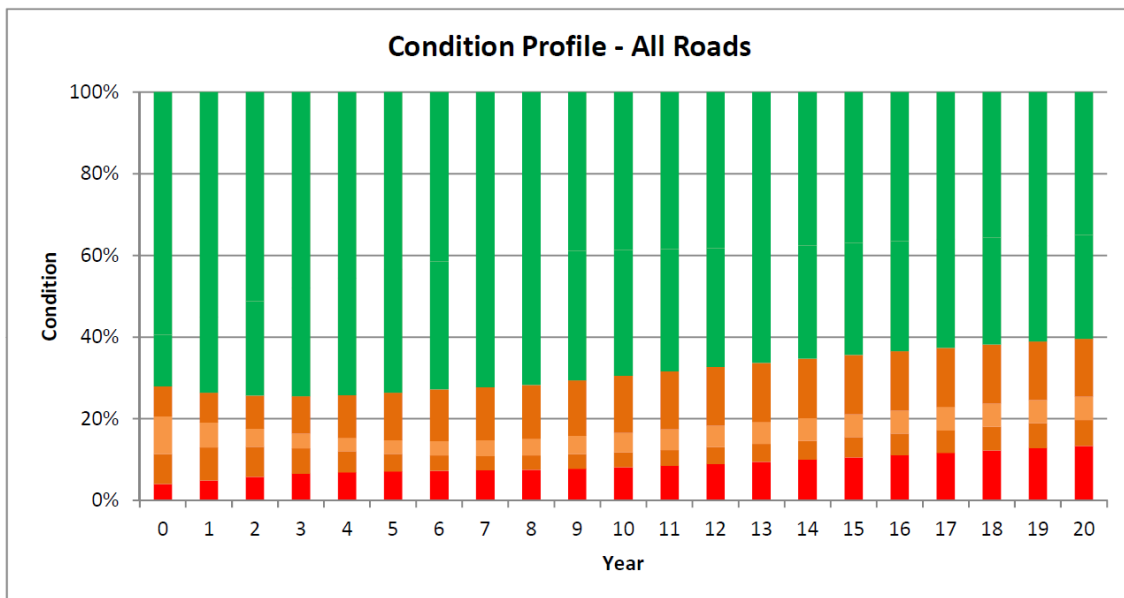
3.9 Costs of maintaining the asset in its current condition for 2011/12 is shown to be £4.1m (planned maintenance, corrective and preventative). An additional £2.3m is required to deliver the current standards for reactive, cyclic and winter maintenance as described in **Appendix B**.

3.10 A continuance of current funding at approximately £3.2m (current years carriageway budget allocation – excluding drainage) is predicted to lead to an overall improvement in condition as illustrated.

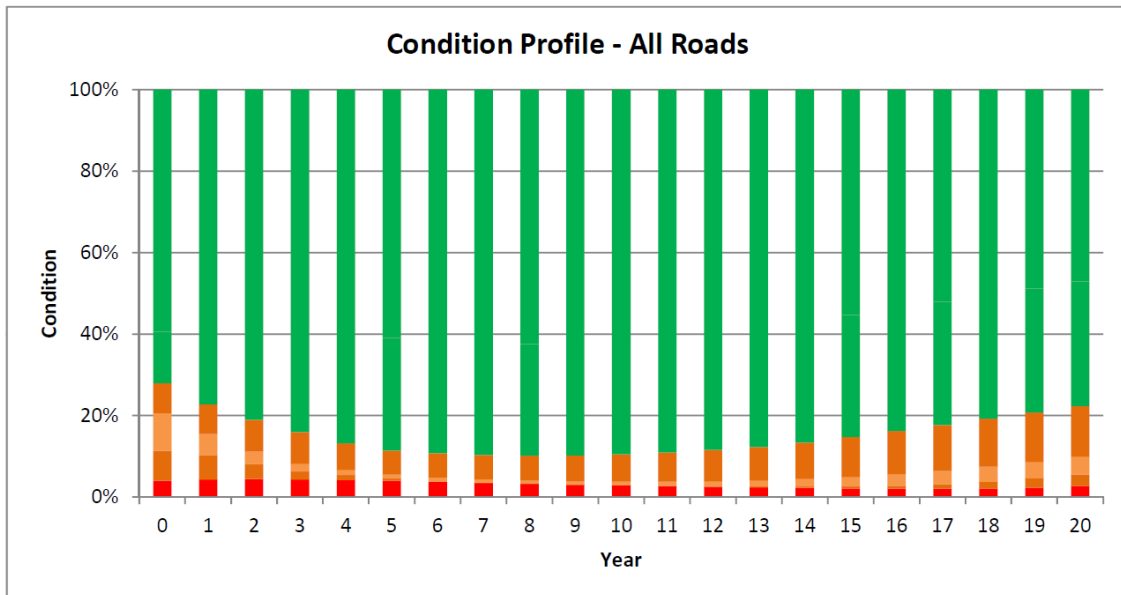


The predicted RCI at the end of 20 years would be 12.64% (current RCI 29%). However, this does not take into account material and labour cost increases, which between 2007-2012 have increased on average 6% per annum. This effectively means that over a 20 year cycle the amount of spend will be reduced to £990,000/ annum in real terms. To achieve the same level of service – accommodating a 6% annual increase – the carriageway budget would have to increase to £9.9m. Unchecked the RCI value would increase to 41%

3.11 A reduction of the funding by 40% (on current £3.2m) would have the effect of increasing the Councils RCI to 39.56% and 58.7% including 6% inflation



3.12 An increase in budgetary spend on carriageway by 30% over a 5 year period and then reverting back to £3.2m spend would have the following effect.



Over a 5 year period the RCI would be reduced to 12% but rise to 23% due to the effect of compound inflation.

4 POLICY IMPLICATIONS

4.1 None

5 EQUALITIES IMPACT ASSESSMENT

5.1 This report is not applicable to the well being of equalities groups and an Equality Impact Assessment is not required.

6 RESOURCE IMPLICATIONS

6.1 Financial – None

6.2 Personnel – None

6.3 Other – None

7 BACKGROUND PAPERS

7.1 None

AUTHOR'S NAME	Brian Cooper
DESIGNATION	Senior Transportation Manager
CONTACT INFO	Peter Forsyth Ext 7724
DATE	16 th May 2012

Appendix A – Carriageway Outputs 2011-12

Category	Charge	Output
Planned Maintenance - Preventative	£645k	- 43.8km of surface treatment (surface dressing)
Planned maintenance - corrective	£3,509k	- 24.0km of surfacing (£2401k) - 1.3km of reconstruction (£661k) - Drainage repairs (£447k)
Routine cyclic maintenance	£253k	- 17225 no. gullies emptied every 12 months, plus 32 with an additional monthly clean pa (£207k) - 2no swathe and visibility splay cuts pa (£39k) - Weedkilling (£7k)
Routine – Reactive repairs (emergency)	£345k	- Emergency call outs (£97.2k) - 3000 cat 1 + 2 repairs (£317.8k) - 5 no. drainage & flooding incidents (£30k)
Routine – Reactive Repairs (non – emergency)	£750k	- 14080m2 of patching (£468,523) - Road marking and stud replacing (£88k) - 22,651 sq.m Footway slurry (46.4K) - 155no. Find and Fix repairs (£111k) - 15no. Misc minor repairs (£36.5k)
Routine – Inspection & Survey		- Condition surveys – SCANNER 100% A roads, 50% B Roads, 25% C roads and 10% U roads - Safety inspections 100% compliance with A + B, C + U inspections

