
Report to: Enterprise and Environment Committee

Date of Meeting: 29 October 2015

Subject: Roads Asset Management Plan Report

Report by: Head of Development and Environment

1.0 Purpose

- 1.1. The purpose of the report is to bring before Committee the Road Asset Management Plan (RAMP), which is the main driver for future maintenance and management of the overall road network and present the options considered to take forward the management of the Council's road asset.

2.0 Recommendations

It is recommended that Committee :

- 2.1. Agree the 2015-18 Roads Asset Management Plan for approval by Council.
- 2.2. Note the contents of the report including the outcomes from the 2014/15 Scottish Road Maintenance Condition Survey.

3.0 Background

- 3.1. In November 2010 Clackmannanshire Council approved its initial Roads Asset management Plan (RAMP 2010). In March 2013, the Council approved the updated Roads Asset Management Plan (RAMP 2013).
- 3.2. The Roads Asset Management Plan (RAMP) records the Council's plans for the maintenance of the Roads Assets, for the period 2015-18 (a full version of the report will be placed in the Group Rooms). The "Roads Asset" comprises of carriageways, footways, structures, street lighting, traffic management systems and street furniture.
- 3.3. This Plan is consistent with the Council's corporate approach to asset management as set out in the Corporate Asset Management Strategy.
- 3.4. The purpose of the RAMP is to formalise strategies for investment in Roads Asset groups and define service standards. The Plan aims to improve how the Roads Asset is managed and to enable a value for money roads service to be delivered. The Council has currently allocated capital investment of £4.5 m over the period of this Plan (3 years), along with current revenue of

around £150,000, aimed at maintaining the carriageway network in a 'steady-state'.

- 3.5. The content of the RAMP has been produced using a framework common across all Scottish Councils, established by the Society of Chief Officers of Transportation in Scotland (SCOTS) and includes the production of the Code of Practice on Transport Infrastructure Assets published by the Chartered Institute of Public Finance and Accounts (CIPFA).
- 3.6. The SCOTS initial 4 year implementation project is now complete. While councils have progressed the implementation of asset management at varying speeds, Clackmannanshire has consistently been in the forefront of the development of road asset management practices in line with the objectives of the project.
- 3.7. All Councils in Scotland receive support and participate in maintaining and developing their Road Asset Management Plans through SCOTS. The cost of participating is currently £5,500 for Clackmannanshire. The project is in its second year and the anticipated duration of the project is 3 to 4 years.
- 3.8. The progress made on the national project was noted in Audit Scotland's report, "Maintaining Scotland's Roads - A Follow Up Report" which was presented to the Council on 30 June 2011.
- 3.9. In June 2012, an external audit was undertaken on Roads & Transportation, resulting in the 'Report to the Scrutiny and Audit Committee' that summarised the progress that the Council had made in improving its management of road maintenance, focusing on road asset management planning, performance management and maximising value for money. The outcome was very positive and highlighted the steps that were being taken within the Council.

Road Maintenance Condition Survey

- 3.10. The baseline for road condition has been assessed by the Scottish Road Maintenance Condition Survey since 2002. The survey data allows a Council by Council Road Condition Indicator (RCI) to be calculated. The data is collected as part of a Scotland wide contract arranged by the Society of Chief Officers of Transportation in Scotland (SCOTS) covering all 32 Councils. The survey is machine based, eliminating subjective assessment, and is subject to stringent independent audit and quality assurance checks.
- 3.11. The road network is split by classification as follows :
 - A Class – major roads intended to provide large-scale transport links within or between areas.
 - B Class – roads intended to connect different areas, and to feed traffic between A roads and smaller roads on the network.
 - C Class (Classified unnumbered) – smaller roads intended to connect together unclassified roads with A and B roads, and often linking a housing estate or a village to the rest of the network.
 - Unclassified – local roads intended for local traffic (just over 60% of our network).

- 3.12. The Statutory Performance Indicator for the condition of roads is the percentage of the network in the Red and Amber categories. An increase in the figure indicates deterioration and a decrease indicates improvement. While the survey data is collected on an annual basis, the RCI is derived using the survey data collected over the two previous years to minimise any potential variation between surveys.
- 3.13. The measurements from the survey are used in the model to determine nationally and for each Council :-
- the value of the backlog in road maintenance,
 - the budget needed to maintain roads in their present condition
 - the outcome of different budget allocations.

4.0 Considerations

- 4.1. The results of the previous 2013 - 2015 Road Maintenance Condition Surveys detailed deterioration in the performance of the road network.

Overall Network (All classification of roads)

	RCI
National Average	37.0
Clackmannanshire	39.2*

(*Note - By request, this data has been examined and the accuracy subsequently questioned by the Transport Research Laboratory)

- 4.2. The results of the 2014 - 2016 Road Maintenance Condition Survey have recently been made available to individual Authorities, the latest RCI for Clackmannanshire network is 36.2, showing an improvement in the road asset network of Clackmannanshire. The Scottish average is yet to be known for 2014-16. This table details the condition score for each road classification.

	A Class	B Class	C Class	U Class	Network
2013-15	30.1	32.4	41.4	42.9	39.2
2014-16	23.6	28.5	32.5	41.9	36.2

- 4.3. The current (2014 - 2016) RCI reflects a perceived more accurate relationship between the condition of the Council's network and those roads in other local authority areas.
- 4.4. The improvements (or lack of deterioration) on the higher priority roads reflects the Council's strategy of allocating the majority of the available funding to the more heavily trafficked strategic roads.
- 4.5. The budget required to eliminate the structural maintenance backlog in Clackmannanshire is in excess of £14.54 million. This is a decrease of 3% from the calculation undertaken 2 years previous.

- 4.6. The model used within the RAMP highlights that the annual structural maintenance budget required to simply maintain Clackmannanshire's roads in their present condition is £1.78 million. The expenditure in 2014/15, on works which added long term value to the network was around £1.63 million. The capital requirement for maintaining Clackmannanshire's road network will be fed into the Capital Investment Group in preparation for the 2016/17 budget.
- 4.7. In comparison to historical investment, future investment is planned to be :
- Carriageways : Maintain capital investment to match (or approach) the 'steady state' figure calculated through the Cost Projection Model.
 - Footways : Maintain capital investment but reduced revenue funding.
 - Structures: Level of investment maintained at similar levels, any additional funding requested as required from output of inspection regime.
 - Street lighting : Level of column stock replacement investment maintained at existing levels, plus proposed significant additional investment in "spend to save" energy efficiency initiatives.
 - Traffic signals : Maintain level of investment where new installations are required. 20 year cost prediction model accurately reflects future spend requirements.

4.0 Sustainability Implications

- 4.1. The RAMP highlights the current sustainability practices, policies and objectives within the management of the road network. Primarily focused on achieving best value from our existing resources, reducing carbon emissions and energy consumption, while increasing the use of recycled materials as appropriate.

5.0 Resource Implications

5.1. Financial Details

- 5.2. There are no financial implications associated with this report. The capital requirements for the road network will be fed into the Capital Investment Group and detailed in the 2016/17 Council budget.

Yes No

5.3. Staffing

- 5.4. There are no staffing implications with this report.

Yes

6.0 Exempt Reports

- 6.1. Is this report exempt? Yes (please detail the reasons for exemption below) No

7.0 Declarations

The recommendations contained within this report support or implement our Corporate Priorities and Council Policies.

(1) **Our Priorities** (Please double click on the check box)

- | | |
|--|-------------------------------------|
| The area has a positive image and attracts people and businesses | <input checked="" type="checkbox"/> |
| Our communities are more cohesive and inclusive | <input checked="" type="checkbox"/> |
| People are better skilled, trained and ready for learning and employment | <input type="checkbox"/> |
| Our communities are safer | <input checked="" type="checkbox"/> |
| Vulnerable people and families are supported | <input checked="" type="checkbox"/> |
| Substance misuse and its effects are reduced | <input type="checkbox"/> |
| Health is improving and health inequalities are reducing | <input type="checkbox"/> |
| The environment is protected and enhanced for all | <input checked="" type="checkbox"/> |
| The Council is effective, efficient and recognised for excellence | <input checked="" type="checkbox"/> |

(2) **Council Policies** (Please detail)

8.0 Equalities Impact

- 8.1. Have you undertaken the required equalities impact assessment to ensure that no groups are adversely affected by the recommendations?
Yes No

9.0 Legality

- 9.1. It has been confirmed that in adopting the recommendations contained in this report, the Council is acting within its legal powers. Yes

10.0 Appendices

- 10.1. Please list any appendices attached to this report. If there are no appendices, please state "none".

Appendix 1 - Roads Asset Management Plan 2015-2018 Executive Summary

11.0 Background Papers

- 11.1. Have you used other documents to compile your report? (All documents must be kept available by the author for public inspection for four years from the date of meeting at which the report is considered).

Yes (please list the documents below) No

Author(s)

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Approved by

NAME	DESIGNATION	SIGNATURE
Gordon McNeil	Head of Development & Environment	Signed: Gordon McNeil
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EXECUTIVE SUMMARY

Clackmannanshire has an extensive road asset network with an estimated value of around £0.65 billion. The network includes almost 289km of carriageway, 425km of footway & footpath, over 8800 street lighting units and around 123 structures. The quantity of these assets continues to increase annually.

Current value of assets as per Whole of Government Accounting

	Gross Replacement Cost (GRC) estimate	Depreciated Replacement Cost £'000	Annualised Depreciation Charge £'000
	£'000	£'000	£'000
Carriageway	£350,273	£311,898	£3,018
Footway	£53,900	£39,059	£662
Structures	£50,952	£49,767	£160
Street Lighting	£26,415	£14,622	£638
Street Furniture	£2,234	£1,114	£109
Traffic Management Systems	£669	£443	£33
Land	£174,239		
Total	£658,683	£416,902	£4,620

Clackmannanshire Council, like all public bodies, is being placed under increasing pressure to justify investment and to demonstrate that best use is being made of resources. The Roads Asset Management Plan (RAMP) documents the policies and practices that we shall use to achieve these objectives.

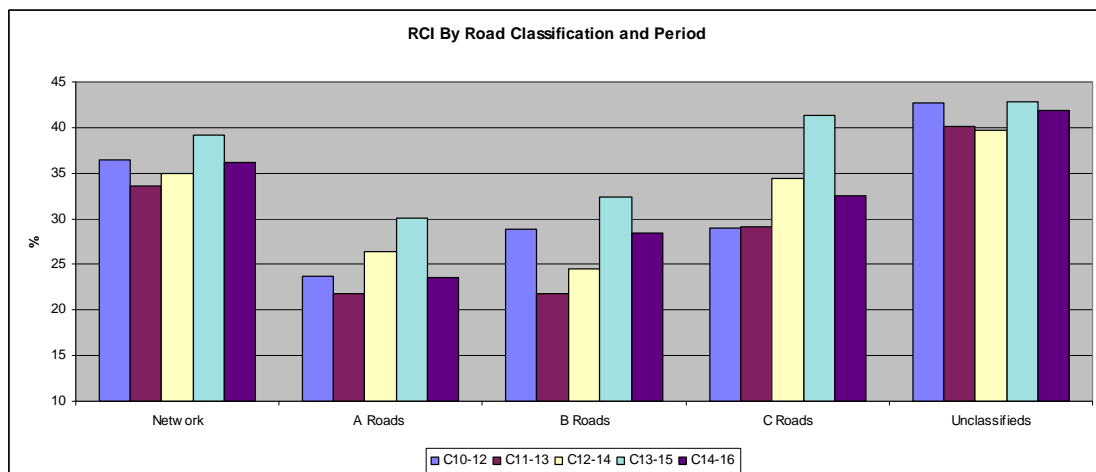
The RAMP is developing to utilise information on asset performance, current levels of service, condition and deterioration, to identify funding requirements now and in the future. Predicting when future intervention / treatment is required enables appropriate priorities to be established and helps to plan work on the whole asset in a more coordinated and cost effective way. The RAMP will provide demonstrable and transparent evidence of the distribution of resources to assets that have the greatest need and make the most efficient use of limited resources. Decision makers will be better informed in the range of options available and future implications and budget requests will be supported by a fact based assessment of needs.

The main output from the RAMP will be a long term programme of asset investment based on need, enabling the Council to prepare for future budget

demands. Current asset renewal programmes are predominantly based on condition and generally result in treatment being targeted at those assets that have become “worn-out” (or life expired). Using an asset management approach and better projections of future asset condition, the Council would wish to move towards an approach that intervenes much earlier and treats assets before they have become life expired, enabling more cost effective treatments to be used. These should result in more of the asset being treated / renewed.

Carriageways

The baseline for road condition has been assessed by the Scottish Road Maintenance Condition Survey since 2002. The survey data allows a Council by Council Road Condition Indicator (RCI) to be calculated. The Statutory Performance Indicator for the condition of roads is the percentage of the network in the Red and Amber categories. While the survey data is collected on an annual basis, the RCI is derived using the survey data collected over the two previous years to minimise any potential variation between surveys.



Maintenance costs and road lengths are increasing, while the network is becoming more complex (traffic calming, anti-skid surfacing, etc). This Service is striving to implement a planned and proactive methodology (using thin surfacings and surface dressings). Additional capital investment provided by the Council in recent years is almost to the level calculated in order to maintain a 'steady state'. This strategy is based on assuming normal network conditions therefore would be affected by external factors, such as the adverse weather during winter 2009/10.

One of the objectives of the RAMP is to develop a longer term programme of works based on future need. The Service is moving towards a 3 to 5 year works programme. Obviously this programme is subject to change where funding levels are amended or where network conditions dictate.

Drainage and Flooding

Costs related to the maintenance of drainage systems are currently included within the carriageway assets as per the CIPFA guidance. Maintenance and improvement costs of these systems have increased in recent years due to a historical lack of upkeep and also the increase in the number and severity of adverse weather events.

The Service has made operational efficiencies which have helped to control these costs and minimise the risk of significant flood events.

Footways & Footpaths

The Service carried out a condition survey on the entire footway and footpath network during 2013 / 2014. The results were encouraging but highlighted that around 31% of the network (132km) was in need of maintenance. The bulk of this work is still outstanding. Current funding levels should allow the Service to maintain the footway / footpath network in a steady-state.

While a significant proportion of the network is requiring maintenance, the majority of safety related defects are identified and rectified through the safety inspection procedures and reactive maintenance programme.

High car ownership and the resultant lack of available parking in residential areas is causing increased occurrences of parking on footways. This significantly reduces the lifespan of the asset. Although illegal, Police Scotland have shown no interest in prosecuting to prevent this practice.

Capital matched funding (Clacks Council 65% / Sustrans 35%) has been used to construct significant lengths of new cycleways over recent years. There are now numerous quality routes within the County (although currently not adopted) but there is no additional provision for maintenance.

Street Lighting

A significant level of underfunding over a number of years has caused a backlog of required street lighting replacement works. It is estimated that investment of around £1.4 million is required to clear this backlog.

Due to the spiralling energy costs and pressures to reduce its carbon footprint, the Council has committed into a spend to save initiative for the implementation of LED lighting. Lighting units in the residential areas of Clackmannan and Tullibody were upgraded in 2014/15. Currently further funding is allocated for upgrading lighting in Tillicoultry in 2016/17 through the MCB strategy.

The Service implemented formal procedures to undertake around 1550 electrical and structural inspections each financial year. This will allow each lighting unit within the County to be formally inspected every 6 years as required within Well Lit Highways - Code of Practice for Highways Lighting

Maintenance. The cost of these inspections during 2015/16 is estimated at around 28k (excluding any repairs / replacement required).

Priority is given to identified schemes based on column age, size and material type. This forms the basis of the annual works programme, although the output from electrical and structural inspections may induce change to this programme. It is estimated that there are around 1900 units which have now exceeded their service lives.

The Service has recently entered into a Service Level Agreement with Falkirk Council, who now assist with the lighting client function. This includes controlling the day to day workflow and design of new / upgraded schemes.

Structures

The Service no longer employs a structural engineer and subsequently has contracted Falkirk Council to carry out inspections on our bridge stock in accordance with the Management of Highway Structures Code of Practice and to produce annual maintenance strategies.

The preliminary work required to initiate the repairs has to be incorporated into the workload of other staff.

Overall

The Service has undertaken a number of initiatives to improve value for money such as partnership working with other Councils; developing a joint framework procurement contract which provides competitive rates while allowing comparison of costs with the private sector; Service reconfiguration; pooling and flexible use of resources and other innovative practices such as thermal pothole repair techniques.

Performance

Defined levels of service are used to develop asset management strategies to deliver the required level of service and measure performance against defined targets.

A suite of Performance Indicators (PI's) are reported through the SCOTS Road Asset Management Project in conjunction with APSE Performance Networks. These PI's will be adopted by this Service, where appropriate, and used to measure performance against stated Levels of Service through internal targets and for benchmarking.

The Service sets annual targets and strives for continuous improvement. These targets are measured against how the Service actually performs, which is recorded and reported through the PI's. As the RAMP develops, customer consultation will assist in remodelling targets and focusing resources more in accordance with stakeholder desire.

Financial Summary

Funding levels within local authorities are constantly being challenged yet expectations of the levels of service continue to increase. The National Roads Maintenance Review has established that “a £1 reduction in road maintenance results in a £1.50 cost to the wider Scottish economy and society” and stated “spending on road maintenance clearly delivers economic and social benefits to Scotland”.

Funding within Roads & Transportation is split between a number of service headings based primarily on historical precedence but subjected to change at the discretion of the budget holder.

2014/15 Roads Budgets by Capital and Revenue

Current Roads Budget	Total £	Revenue £	Capital £
Carriageways	£2,175,783	£582,491	£1,593,292
Footways & Cycle Tracks	£920,169	£68,817	£851,352
Structures	£49,159	£45,524	£3,635
Highway Lighting	£1,069,002	£298,954	£770,048
Street Furniture	£95,094	£62,819	£32,275
Traffic Management Systems	£161,031	£0	£161,031
Land	Na	na	na
Operating Costs	£730,677	£693,128	£37,549
Overheads	£844,086	£826,766	£17,320
Total	£6,045,001	£2,578,499	£3,466,502

A detailed split of actual roads expenditure and cost category for 2014/15 (in accordance with CIPFA guidelines) can be found in Appendix A.

Major Asset Risks

Risk management is an important aspect of developing the management practices required to maintain the asset. Risks are identified, assessed, prioritised and then managed to mitigate impacts on service delivery. The major risks identified with each individual asset group tend to be generic to all assets. The risks to assets causing the greatest concern at present are:-

- Increase in network liabilities
- Impacts of adverse / more extreme weather
- Failure of the construction or sever loss of skid resistance on the carriageways

Improvement Plan

An improvement action plan has been created to support this plan. For the duration of this version of the RAMP, the key milestones are as follows:-

- Further improve asset information strategy. Finalise capture of information for carriageways, footways (paths) and street lighting. Then progress to other core data.
- Further improve working practices and reporting methods to ensure systems have data which will be required for providing SCOTS / APSE performance data
- Develop systems to allow progression of Structures SLA with Falkirk Council. Ensuring Falkirk have access to SMS in order that data and condition information is available to both parties.
- Further develop levels of service and whole life costing in accordance with SCOTS project (option 5 of the National Road Maintenance Review)
- Develop systems to allow progression of Lighting SLA with Falkirk Council. Ensuring Falkirk have access to LMS in order that data and condition information is available to both parties.

Appendix A

Actual Roads Expenditure by Asset and Cost Category for last completed financial year (2014/15)

(Asset Categories in accordance with CIPFA guidance for Whole of Government Accounts)

Asset Type	Total	Planned Maintenance - preventative	Planned Maintenance - Corrective	Routine Cyclic Maintenance	Routine - Reactive Repairs (emergency)	Routine - Reactive Repairs (non-emergency)	Routine - Inspection & Survey	Operating Costs	Overhead	Loss	Improvements
Carriageways	£2,405,798	£181,601	£1,498,795	£65,287	£57,223	£225,549	£21,370	£230,015		£0	£125,958
Footways & Cycle Tracks	£1,061,369	£0	£317,350	£0	£10,167	£58,650	£0	£141,200		£0	£534,002
Structures	£49,159	£22,770	£0	£0	£0	£22,754	£0	£0		£0	£3,635
Highway Lighting	£1,417,028	£638,548	£224,612	£0	£12,161	£166,136	£27,545	£348,026		£0	£0
Street Furniture	£95,350	£0	£42,331	£15,050	£0	£5,438	£0	£256		£0	£32,275
Traffic Management Systems	£172,211	£0	£10,521	£0	£0	£0	£0	£11,180		£0	£150,510
Land	Na	na	na	na	na	na	na	na	na	na	na
Employee Costs	£768,526							£768,526		£0	£0
Overheads	£75,560								£75,560	£0	£0
Total	£6,045,001	£76,200	£1,175,000	£105,100	£100,400	£615,000	£60,800	£1,633,200	£754,600	£2,300	£1,155,000

Note - CIPFA currently advise that costs for drainage works should be recorded under carriageways. Hence the costs above differ from the figures shown within the carriageway lifecycle plan.

