



**Clackmannanshire  
Council**

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# Road Asset Management Plan 2012



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### **EXECUTIVE SUMMARY**

Clackmannanshire has an extensive road asset network with an estimated value of around £0.5 billion. The network includes over 287km of carriageway, 430km of footway & footpath, over 8600 street lighting units and around 118 structures.

These assets have a huge impact on the viability and vitality of the County's economy and way of life. The operation and maintenance of these fundamental assets must support the local area by delivering the required service to road users and by using public money wisely. There is however growing concern that these vital and valuable assets are not receiving the funding required to maintain them to a standard fit for purpose.

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. We fully appreciate this situation and are taking positive and innovative steps to ensure our management practices are up to the challenge.

This is the second version of our RAMP, set out in accordance with the framework established by the national project through the Society of Chief Officers for Transportation in Scotland (SCOTS). The first version was approved by Council in November 2010.

RAMP2 makes best use of the progressing asset and financial data to further improve the indicative value of the road asset, backlogs, additional funding need and is structured to comply with the requirements of Whole of Government Accounting. The Plan has identified additional milestones to be reached and improvement actions that require to be addressed in order to further develop the application of asset management principles.

RAMP2 confirms the Council's commitment to adopting asset management as a policy and to applying asset management systems for the management of the roads asset.

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## 1. INTRODUCTION

The road infrastructure is a key and highly visible community asset, supporting the national and local economy and contributing to the character and environment of the areas that it serves. Despite this there is growing concern that the management of this asset is not receiving the attention or funding required to preserve and replenish the network in a sustainable manner.

The purpose of this document is to set out the systematic approach adopted by Clackmannanshire Council for the management of its road asset. Many principles of asset management are already embedded in the policies, processes and practices undertaken within the Service. By formalising this document, this RAMP will provide a central reference document for these policies, processes and practises.

RAMP1 (v1.09) was approved by the Elected Members at the meeting of Clackmannanshire Council on 4 November 2010.

### 1.1 What is asset management

The County Surveyors Society defines asset management within it's Framework for Highway Asset Management as:

A strategic approach that identifies the optimal allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure to meet the needs of current and future customers

A longer term strategic approach is essential if Clackmannanshire Council is to maximise the long-term benefits of the available resources.

The use of lifecycle planning; the minimisation of whole life costs; and decision making informed by an appreciation of risk and benefit, are key asset management components that will assist in allocating resources for maximum benefit.

The development of levels of service will assist in explicitly taking account of the needs and aspirations of stakeholders and service users.

### 1.2 Drivers for asset management

Road Authorities exercise their duties to maintain, operate and improve their road assets under increasing pressures that include inadequate budgets, limited resources, mature networks, increased accountability, climate change, carbon reduction and increasing public expectations.

The development process of the RAMP assesses the strengths and weaknesses of our existing systems and methods in managing the road network. The Plan will enable an asset management system to be developed for managing road assets on a long-term basis, delivering better value.

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Nationally there is increasing pressure towards the development of an asset management approach. Key drivers include the recommendations specified within the National Road Maintenance Review, Audit Scotland's Report "Maintaining Scotland's Roads" 2004 and the adopted method of Resource Accounting and Budgeting (RAB) required by Whole of Government Accounts (WGA).

To assist with the WGA process, the Chartered Institute of Public Finance & Accountancy (CIPFA) have developed a Transport Infrastructure Assets Code to support an asset management based approach to the provision of financial information about local authority assets. The intention is that each authority should develop a single set of financial management information about these assets which is robust and consistent and supports:-

- good, evidence based, asset management, including the development of more cost effective maintenance and replacement programmes;
- delivery of efficiency savings and service improvements;
- long term financial planning and budgeting;
- corporate capital planning and the operation of the Prudential Code;
- performance assessment and benchmarking;
- resource allocation, locally, at regional level and nationally;
- production of transparent information for stakeholders on the authority's management of its roads assets;
- production of financial information that is compliant with International Financial Reporting Standards and meets the needs of WGA and National Accounts;
- any future move to current value financial reporting of the assets in local authorities' own accounts.

Over the last 12-18 months the SCOTS RAMP project has focused on ensuring that Roads Authorities asset management plans are developed to enable the provision of the financial information as specified within the CIPFA guidance.

### **1.3 Clackmannanshire Council's Road Asset Management Plan**

RAMP2 details the development and application of asset management practices within Roads and Transportation. RAMP1 was developed by undertaking a thorough and rigorous review of current practice. RAMP2 outlines and promotes changes to working practices to support an asset management approach.

RAMP2 provides a further developed programme of asset management improvements within the Service. It develops the quantitative record of what assets are held and their condition, as well as presenting a qualitative record of what data

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is missing. By highlighting the risks associated with the management of the Council's road asset, it offers a lever to target additional resources while affording an opportunity to raise the profile of the Service.

Working towards completion of an Action Plan which will allow the Service to work towards the implementation of adopting full asset management practice, is a key aim of RAMP2.

It is important to note that the Service is continuing along a learning curve on its path to adopting an asset management approach and as such there will still be considerable room for improvement within the organisation (as is common with most other Authorities undertaking this process)

### **1.4 How does this plan fit with the Council's corporate approach to asset management?**

The Council is in the process of developing a Corporate Asset Management Strategy and Plan. Asset management champions from various Services have been nominated and are attending development meetings. This process will assist in ensuring that the Roads and Property Asset Management Plans will relate to each other and be incorporated into a corporate strategy.

### **1.5 What are the Council's objectives in relation to the road asset?**

While not directly referenced within the Single Outcome Agreement (SOA), the network is key in supporting the majority of the Council's business objectives. These objectives are outlined in the planning & policy documents shown below. The SOA indicators and targets, most significant to the Service are:

- ◆ Indicator 4    reduce the proportion of driver journeys delayed due to traffic congestion
- ◆ Indicator 28    Increase the percentage of adults who rate their neighbourhood as a good place to live
- ◆ Indicator 32    reduce overall ecological footprint
- ◆ Indicator 36    increase the numbers of journeys to work made by public or active transport
- ◆ Indicator 37    increase the proportion of adults making one or more visits to the outdoors per week
- ◆ Indicator 42    improve public sector efficiency through the generation of 2% cash releasing efficiency savings per annum
- ◆ Indicator 43    improve people's perceptions of the quality of public services delivered

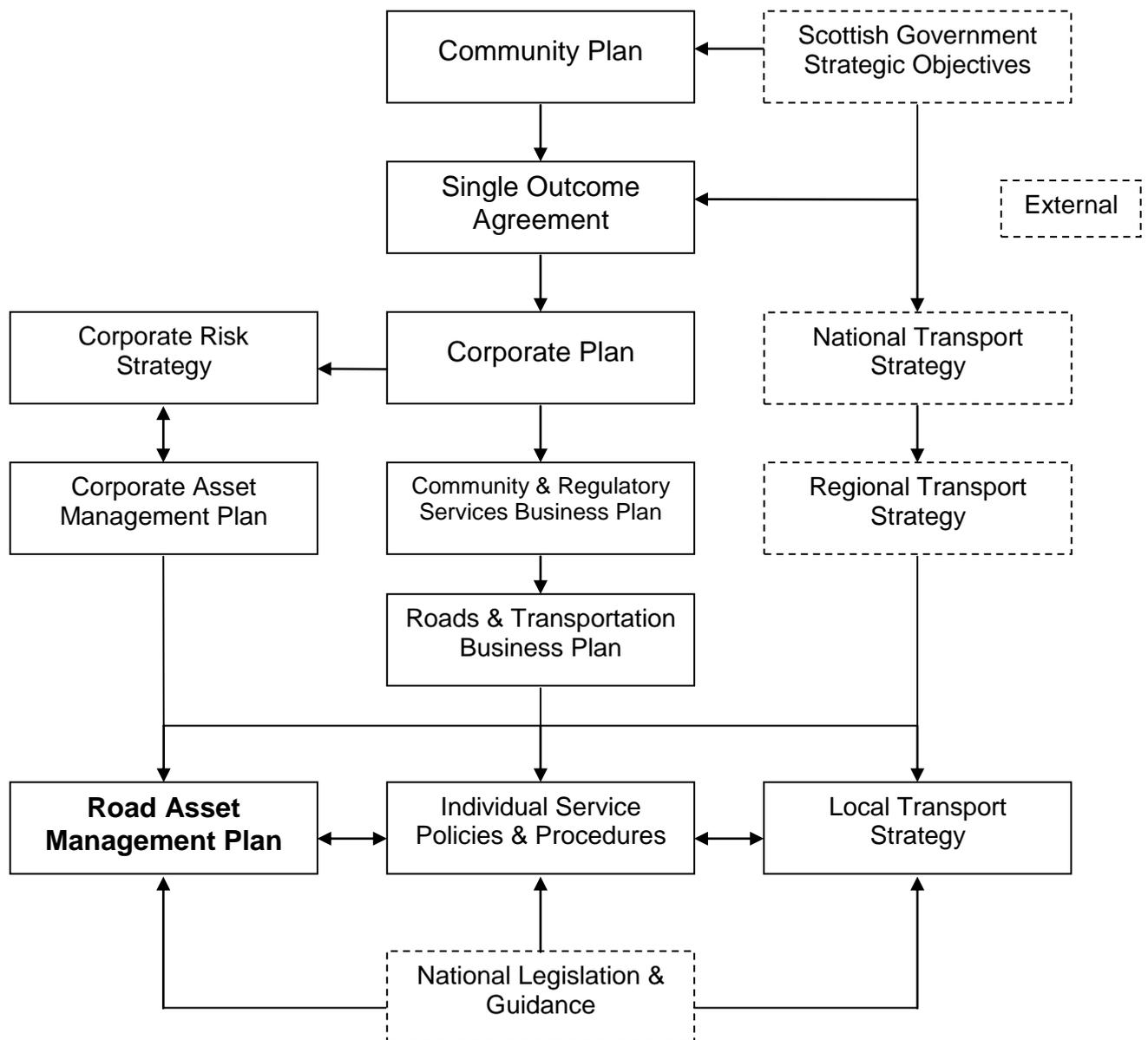
The Council is also the Roads Authority and has a duty under the Roads (Scotland) Act 1984 to manage the publicly maintained road network, ensuring it is kept in a safe condition for all road users and to take such steps as it considers reasonable to prevent snow and ice endangering road users.

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## 1.6 What time period will the RAMP cover and when will it be updated?

RAMP2 will cover the period 2012 - 2013. It is expected that the plan will be updated annually until 2014. It is expected that the RAMP will then be developed to an extent that the updating frequency may be reviewed and potentially extended to a three year cycle.

## 1.7 Strategic Document Framework



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## 2. ASSET DESCRIPTION

### 2.1 The Road Asset

The road network is the most highly valued physical asset, both in financial and community terms, for which authorities are responsible. It is key in supporting nearly all of the Council's business objectives. This second version of the RAMP is focused on the following asset groups;

- Carriageways (including drainage costs)
- Structures
- Traffic Management Systems (Traffic & pedestrian signals)
- Other Paved Areas (footways, footpaths, cycleways & car parks)
- Street Lighting
- Street Furniture (non-lit signs, safety fences, barriers, bollards & bus shelters)

Further information on the elements contained (or not) within these asset groups are provided in the lifecycle plans in Appendix f. These groups are developed in accordance with CIPFA guidance.

### 2.2 The Size of the Asset

The Council's adopted road network currently consists of the following recorded data (figures correct at June 2012);

- 287 km of road carriageway
- 699,050 sqm of footways (approximately 388km)
- 8602 street lights
- 2 sets of traffic signals
- 49 no. bridges (inc 9 in shared ownership)
- 16 car parks
- 104,100 sqm of remote footpaths (approximately 42km)
- 390 illuminated signs
- 77 lit bollards
- 75 no. culverts (inc 4 shared ownership)
- 9 no. footbridges

Data analysis has been undertaken on each of these major asset groups as part of this project. The result of this analysis is shown within the Core Data tables in Appendix b.

The confidence in the quantities of the data shown above is very high although there are numerous gaps in data coverage (for example we are aware where all of our footways are located, but are unsure of the date that maintenance works were last carried out on each section). Details of data required to be captured in order for the asset management process to be implemented is contained within the Improvement Plan in Appendix i.

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### 2.3 What assets are not covered by this Plan?

The initial plan does not include data outwith the major asset groups listed above. Assets excluded at present include drainage, traffic calming schemes, road markings and road studs. In addition the RAMP only looks at Council assets maintained by Roads & Transportation. Private roads or carriageways, footpaths, cycleways and car parks maintained by other Services (such as housing / education) are not included.

### 2.4 Asset Growth

The following table highlights recent change in each of the major asset groups;

Asset Type	Period	Change in Total	% Change	% Change Per Annum
Carriageways	1999-2012	+ 29.6 km	+ 11.5%	+ 0.89%
Footways	1999-2012	+73,565 sqm	+ 11.8%	+ 0.91%
Footpaths	1999-2012	+ 6,795 sqm	+ 7.0%	+ 0.54%
Street Lighting	2005-2011	+ 927 columns	+11.9%	+1.70%
Bridges	2004-2011	+2 bridges	+5.0%	+0.71%

With regards to the carriageway and footway assets, the majority of growth is due to new residential developments. However some routes have been constructed for transport improvements undertaken due to increased traffic demand (schemes such as the B9140 Tullibody Bypass and the B909 Alloa Eastern Link Road).

New legislation and policy accounts for a significant percentage of growth within the footpath and street lighting assets. The political desire for safer walking and cycling routes is a key factor in asset growth (note the above figures do not include remote cycleways as these are not currently on the List of Roads).

Specific schemes which will result in asset growth in the near future may include the development of the new settlement at Forestmill and the demand for more sustainable transportation services leading to more need to cater for pedestrians and cyclists.

### 2.5 Complexity and make up?

The desire for the increased usage of higher quality materials, such as better lighting or granite setts in high amenity areas, increases maintenance costs and complexity. New planning policies (Designing Streets) which pursue the development of innovative sustainable urban design, utilising alternative materials and focusing on non-standard road layouts will further complicate maintenance schemes in the future.

The growth in traffic calming measures is having a significant effect on maintenance resources due to it's detrimental effect on the carriageway lifespan.

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Replacement costs for these traffic calming features, together with the difficulties they present to the contractors carrying out works, including winter maintenance, further increases the unit cost rates.

Other factors that will create a significantly increased future maintenance need include the use of high friction surfaces at pedestrian crossings / traffic lights, which require more frequent renewal than traditional surfaces, and the legislative need for sustainable urban drainage systems (SUDS) in new developments.

### 2.6 Current Priorities

The Service is currently working to the following priorities for investment on the roads infrastructure:-

#### *Roads*

- Treating defects which carry a risk to life & limb.
- Surfacing of the busiest strategic roads highlighted by SRMCS.

#### *Footways & Footpaths*

- Treating defects which carry a risk to pedestrians.
- Upgrading concrete slabbed footways to blacktop.
- Resurfacing the most heavily used footways (in need of repair).

#### *Structures*

- Ensuring bridges on the strategic road network are capable of carrying the necessary vehicle loading.

#### *Street Lighting*

- Replacement of columns which have failed electrical or structural testing
- Replacement of older columns on safety grounds.
- Improvement in lighting levels to current standards.

While these priorities may (or may not) change through the development of asset management practice, the Service also has to remain able to be event driven, coping with emergencies and urgent works when the need arises.

Recent examples include such events as the severe winters of 2009/10 and 2010/11, numerous flooding incidents (notably in Tillicoultry and Menstrie) and the failure of a couple of large retaining walls in Sauchie. These all had a significant effect on both physical and monetary resources.

Effective asset management can limit the effects of these events but obviously cannot eliminate them. Our challenge is that we are most successful when invisible but most noticeable when there are disruptions.

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### 3. COMMUNITY REQUIREMENTS

#### 3.1 Customer Consultation

The Service assesses information obtained from a wide variety of Council sources, but predominately those listed below;

- Local Transport Strategy (LTS) consultation
- Community Councils
- call centre queries / complaints
- citizens panel survey (Clacks 1000)
- representation on business groups
- councillor enquiries
- residents associations
- disability groups

There has not been a specific road related customer satisfaction survey carried out in Clackmannanshire in recent years. There were a number of questions included within the LTS consultation in 2005 and 2009, as to the public's satisfaction towards the condition of sections of the road asset. However these surveys / consultations were not designed to contain specific questions that could be used to influence the Service Standards adopted.

Scheme specific consultation is normally undertaken prior to the implementation of traffic calming schemes to ensure all residents are satisfied with the proposals prior to implementation. There is no real need to consult where we plan to carry out maintenance work, with the exception of leaflet dropping affected residents to raise awareness of temporary disruption / inconvenience.

Historically post scheme surveys have rarely been undertaken for these or any other form of maintenance or improvement schemes. However from June 2011 the Service has introduced post scheme surveys (for works in residential areas), seeking customer feedback.

**Customer Survey**  
*We have recently been working in your street and the project is now complete.*

Clackmannanshire Council  
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1. Did you know that we would be working in your area before work started? Yes  No

If yes, how did you find out about the works?  
 information through your door  
 we put up a notice in the street  
 Council website  
 local press

2. Did you contact us? Yes  No

If yes, were you able to speak to someone to discuss your views? Yes  No

Do you have any other comments?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

For official use only:  
Project No. \_\_\_\_\_

#### 3.2 Results of Consultation

The responses from the LTS survey only allow the Service to define the percentage of respondents satisfied with particular aspects of the network. The results of the 2005 and 2009 surveys are detailed below.

Unfortunately the differing response formats of the two questionnaires means that the results are not directly comparable. These surveys are also subject to potential issues such as flawed questions or dubious samples. For example, many residents

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may be reporting about the condition of the footway outside their own home and the level of winter service provided at this locus. While a further study may indeed prove that the majority of the population would prefer more resources to be used on such treatment, this information can not be reliably extracted from existing surveys.

2005 Asset Group	Good	2009 Asset Group	Good	Adequate or good
Carriageway Condition	36%	Carriageway Condition	13%	66%
Footways / paths Condition	44%	Footways / paths Condition	18%	73%
Winter Maintenance C/way	63%	Winter Maintenance (c/w & f/w)		49%
Winter Maintenance F/way	37%			
Street Lighting Provision	75%	Street Lighting Provision	36%	90%
Roads Safe to Drive	70%	Roads Safe to Drive	77%	
Roads Safe to Walk / Cycle	40%	Roads Safe to Walk / Cycle	50%	

As part of this project this Service will undertake further public opinion surveys to obtain information that can be used to fine tune our Service Standards.

The initial results of the scheme specific customer surveys are as follows:-

Location	Number Returned	% Returned	% Satisfied	General Comments
Norwood Avenue, Alloa	25	64	96	Happy with works done
West Johnstone Street, Alva	12	32	100	Happy with works done
Fairfield Road, Sauchie	9	31	56	Happy with c/way work but complaints about drainage
Collyland / Pitfair Rd, Fishcross	21	37	100	Happy with c/way work but would like f/way done also
Cairnpark Street, Dollar	15	58	73	All happy with c/way works, complaints about lining
Claremont, Alloa	4	11	75	All happy, bar one who was not notified with letter

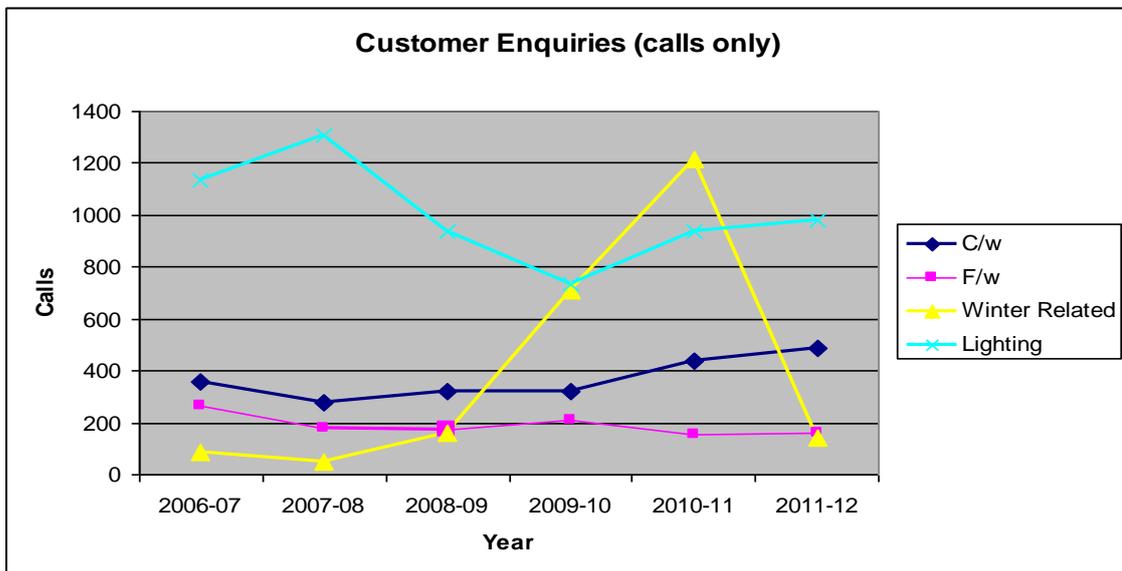
The Council's Contact Centre deal with customer complaints and queries on a daily basis. These are recorded and transferred to the Roads & Street Lighting Section. The number of calls taken annually by the Contact Centre over the past 6 years, directly relating to these asset groups are shown in the table below;

[In addition to calls, in 2010/11 the Service received 93 winter maintenance requests and 33 grit bin requests through the roads@clacks.gov.uk email address. Many other requests are received by email and passed to staff for action but these are not presently quantified.]

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Year	C'way	F'way	Grit Bins	Winter Maintenance	Street Lighting	Total (all assets)
2006-07	359	265	55	29	1135	2271
2007-08	278	177	18	34	1307	2219
2008-09	320	174	101	57	936	1982
2009-10	322	210	377	330	736	2396
2010-11	440	155	417	801	935	3017
2011-12	542	157	104	36	1002	2145

The software application used to record customer enquiries is not currently being fully utilised. This has been identified as an improvement action within this Plan, to ensure all information held within the Council is used to its maximum potential.



### 3.3 Use of Consultation Results

Customer information is used in certain circumstances to assist in determining programmes of works but not to the level of influencing general spending priorities, due to the lack of detailed information described above.

The majority of traffic calming schemes are already designed using feedback received from consultation with residents. Similarly high volumes of customer queries or complaints may generate smaller carriageway or footway patching works. However these currently tend to generate reactive works rather than form part of a longer term maintenance programme, although any relationships with work undertaken in the past has not been documented.

One of the targets for RAMP2 will be to incorporate customer feedback into the targets which are developed to measure levels of service provided.

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### **4. FUTURE DEMANDS**

Clackmannanshire's transport needs have historically increased in line with economic expansion, increased vehicle ownership / use and population growth. This continued growth is placing additional demands on the network infrastructure required to support the County. The various physical, political and legislative factors which will have most affect of future operational costs and management are detailed below.

#### **4.1 Traffic Growth**

Increasing car ownership levels combined with the increasing population and a greater demand for travel are resulting in higher levels of traffic on our roads. This creates need for road improvement schemes and additionally produces demand for parking, which is particularly significant in both commercial and older residential areas. Resources will be required to meet traffic reduction targets set within the Local Transport Strategy (LTS).

#### **4.2 Traffic Composition**

Increase in HGV traffic on routes which were not designed for such usage reduces the asset lifespan, thereby further increasing overall maintenance costs. While most of the HGV traffic occurs on the principle routes, there are a number of unclassified routes already subject to a significant volume of HGV's. This may require investigation in the near future.

Increasing numbers of privately owned vehicles generating higher numbers of single occupancy trips, the construction of the Clackmannanshire Bridge and the reopening of SAK railway have also significantly affected traffic composition. The Road Traffic Reduction Report within the LTS contains detailed information on traffic flow and growth levels within the area.

#### **4.3 Statutory Undertakers (Public Utilities)**

Utility works have a detrimental affect on asset lifespan and the area has been subjected to major utility mains replacement schemes during recent years. The customer driven nature of the public utility networks mean major replacement / upgrading schemes may be brought forward unexpectedly, at relatively short notice. Despite regular coordination being undertaken, it is not always possible to ensure utility works are carried out prior to road maintenance schemes.

Like many other organisations within the current economic climate, the Statutory Undertakers (SU's) are continually investigating methods of introducing efficiencies. These efficiencies often lead to a reduction in standards which are not conducive to this Service's aim of maximising the lifespan of the existing road network. Therefore monitoring their operations and inspecting any works they undertake will become an increasingly important and resource intensive operation.

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As an outcome of Transport Scotland's National Road Maintenance Review, there will be further study into the long term damage that utility works may cause to the road network. If evidence is found, the SU's may be required to contribute to future network maintenance costs.

### **4.4 Climate Change**

Commitment to reduce our carbon footprint may result in increased short term investment. For example higher quality, more efficient materials and equipment. Also increasing precipitation, intensity and extremes of weather will require increased investment in drainage and flood prevention schemes as well as a review of our winter service provision.

While the Service is actively seeking to encourage the use of recycled materials, maintenance carried out using these materials may often be less cost effective than when utilising virgin materials. Similarly cost effectiveness of 'sustainable materials' over the long term is still to be fully assessed.

There is no specific target for carbon reduction within Roads & Transportation although the Service contributes to the Council's overall emissions and reduction targets. In recent years this Service has been refurbishing / replacing the lighting stock to reduce CO2 output, but these reductions have been largely nullified by the growth in lighting stock.

### **4.5 Changes in Legislation**

There are a number of legislative changes introduced within the last few years which impact considerably on Service delivery. Examples of such legislation include:-

- Transport (Scotland) Act 2005
  - Extended requirement for Roads Authorities (RA's) to enter information into the Scottish Road Works Register
  - Additional requirements to use best endeavours to coordinate the execution of all works affecting roads for which the RA is responsible
- Flood Risk Management (Scotland) Act 2009
  - A framework for coordination and cooperation between all organisations involved in flood risk management
  - Assessment of flood risk and preparation of flood risk management plans
  - New responsibilities for SEPA, Scottish Water and local authorities in relation to flood risk management
  - A revised, streamlined process for flood protection schemes
  - New methods to enable stakeholders and the public to contribute to managing flood risk

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- Water Services (Scotland) Act 2003
  - Introduction of Sustainable Urban Drainage Systems (SUDS)

The Disability Discrimination Act 1995 continues to have significant implications on our resources. Many of our older assets require to be upgraded during routine maintenance in order to meet the requirements of this Act.

Further pressures may arise from initiatives such as the Scottish Government's 2010-2020 vision for a steady reduction in the numbers of those killed and seriously injured, with the ultimate vision of a future where no one is killed on Scotland's roads, and where the injury rate is much reduced.

### **4.6 Local Transport Strategy (LTS)**

The overall transport vision of the LTS is to facilitate the free movement of people and goods within Clackmannanshire by a choice of modes that are safe, accessible and well integrated. The LTS hopes to achieve this by promoting active and sustainable travel, focusing on the five main key targets set out by the Scottish Government of improving the economy, the environment, safety, accessibility and integration. The LTS links many of the other factors within this section.

### **4.7 Economic Factors**

The road asset continues to grow while the current economic climate is dictating that local government reduce spending. This issue is exacerbated by high construction inflation costs and spiraling energy costs.

Focus must be placed on procurement and efficiency savings. The correct balance between quality and price and more importantly the difference between price and cost must be conveyed. Performance must be driven by outcomes and not inputs. Similarly a reduction in spending is not a means to efficiency.

### **4.8 Existing Maintenance Backlog**

A historical lack of maintenance on ageing assets has resulted in the network being in a substandard condition. This backlog requires to be addressed as the overall network condition continues to deteriorate. In recent years resources have been focused on maintaining strategic routes. The condition of the unclassified network is now causing concern.

### **4.9 Increasing Pressure to Adopt Roads**

There is political and stakeholder pressure to adopt a number of historically private roads within the area. There is a possibility that responsibility for all roads and footways that are currently maintained by other Services (Housing / Property / Education), will be transferred to Roads & Transportation. This is not feasible given the current level of resources.

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### 4.10 Current Development Planning Practices

Continual political and economic pressure for development in the area continues to result in additional infrastructure requirements. New UK planning guidance (Designing Streets) advocates non-standard sustainable design for new developments. The desired use of alternative materials and variability of such prospective road layouts will exacerbate future maintenance issues.

Government funding for regeneration schemes & sustainable transport initiatives (Sustrans) in many existing areas of the County is providing both new and additional infrastructure. While this occasionally assists with reducing the current maintenance deficit, no resources are provided to cover the future maintenance of additional assets.

### 4.11 Increasing public expectations

There is increased expectancy for high quality networks to be provided for all modes of travel (private car, public transport infrastructure, cycle networks, footpath routes) and for these networks to be available throughout the year, irrespective of the demands of maintenance or the weather.

### 4.12 Demands for Additional Assets

New assets required by political, stakeholder or legislative need are outlined within the LTS. Those demands within the major asset groups which will significantly affect future costs within the lifecycle of this Plan are outlined below.

<b>Carriageways</b>	• Stakeholder demand for improvement in priority routes -	- A91 (Tillicoultry to Dollar) - B9140 (Collyland to Fishcross)
	• Trader demand for on-street parking in rural village centres	- Alva, Dollar, Sauchie
	• Residents demands for safer neighbourhoods	- Traffic calming schemes to improve safety in residential areas
	• General demand for network availability	- Treatment of snow and ice
<b>Footways / Footpaths &amp; Cycleways</b>	• Political & stakeholder desire for increased sustainable methods of travel	- New footpath links providing safer routes to schools etc - Alva to Tillicoultry shared use path
	• General demand for network availability	- Treatment of snow and ice (including new cycleways)

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### **Street Lighting**

- Council health & safety obligations
  - Carbon footprint reduction
- Replace concrete and ageing steel columns with improved units while increasing lighting levels
  - Introduce energy efficient units on a rolling basis, new schemes to use smart systems offering greater control of lighting levels and usage

### **Drainage**

- Legislative need for SUDS in new developments
- Service required to adopt & maintain schemes once developed

## **RAMP2**

### **5. LEVELS OF SERVICE**

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

#### **5.1 Establishment of Levels of Service (LoS)**

The establishment of LoS should follow a three step process:-

- establish the desired LoS,
- estimate costs,
- bid for funding on this basis.

Traditionally services have been provided using the reverse method - the asset management process will develop to avoid this. Emphasis will be placed on defining methods that are clear, meaningful and can be monitored. Therefore Levels of Service will become more robust as the RAMP matures, with an objective of becoming more stakeholder driven through the consultation process.

Through the historical management of the asset, this Service has a collection of acknowledged service levels which are outlined in Table 5.1. These will be used as a base to define and develop formal LoS.

An annual update of the long term forecast of cost and LOS will be incorporated into the next version of this RAMP.

#### **5.2 Measurement of Levels of Service (LoS)**

Performance measures provide a basis on which to assess the success or otherwise of the implementation of LoS. Each measure has an associated reason, or reasons, for inclusion, such as statutory requirement, Council policy or customer expectation.

Historically the Service had to supply performance indicators through statute, until the Accounts Commission's review in 2009 eliminated the requirement for all but one statutory indicator to be recorded.

A suite of Performance Indicators (PI's) are under development 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 LOS through internal targets and for benchmarking.

In the past, non-statutory indicators have only been recorded where information was known to be available. LoS developed within this Plan may require alterations to working methods for some members of staff.

## **RAMP2**

### **5.3 Targets for Levels of Service**

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.

While targets have to be challenging, they also have to be realistic and attainable. A balance between spend and performance has to be obtained. In the near future it is likely that target levels may drop due to what is achievable given the current economic climate, notwithstanding enhancements in efficiencies.

As the RAMP develops, customer consultation will assist in remodelling targets and focusing resources more in accordance with stakeholder desire.

### **5.4 How is performance against target levels of service reported.**

In 2011 the Council introduced new performance reporting arrangements using the Covalent application. This application will assist in providing reports to the senior management team, Elected Members and provide publicly reported information on strategic projects from Service Improvement Plans, Risk Management and Performance Indicators for a range of key Council services.

The Service is working towards ensuring that all PI's are recorded and reported through Covalent. Targets will also be maintained within this application as they are developed for each LOS.

This will allow performance to be evaluated with reasons for variance noted if applicable. The process will then restart and targets further developed based on the LOS required for the following financial year.

### **5.5 Current & Target Levels of Service**

Performance measures are shown alongside the corresponding LOS in Table 5.1 and performance information is fully detailed in Appendix e.

The Roads & Transportation section is encapsulated within Community & Regulatory Services, hence the Service Business Plan only incorporates high level PI information. All LOS data will be published annually within the RAMP, in addition to being available in Covalent.

Asset	Sub Category	Relevance to Statute/CoP	Level of Service	Performance Measure	Reported / Reported To	Comments (The SCOTS Performance Group joined with APSE in 2012 to form a more cohesive approach to PI's.)	Corporate Priority Outcome
Carriageway and Footways	Network Condition	Roads (Scotland) Act (RSA) CoP Well Maintained Highway (CoPWMH)	Maintain condition of carriageway and footways / footpaths at current levels	SCOTS PI 40 SCOTS PI 44 SCOTS PI 47	SCOTS APSE Covalent	There are additional stats within the SCOTS Performance Framework detailing further information on the LoS achieved	
	Repair of Defects (pothole / missing ironwork, road markings etc).	RSA CoPWMH	Specified within the Service's 'Road Safety Inspection Standards & Procedures'	SCOTS PI 37 SCOTS PI 03b SCOTS PI 45	SCOTS APSE Covalent		
	Safety Inspection of Road Network	RSA CoP WMH	Specified within the Service's 'Road Safety Inspection Standards & Procedures'	SCOTS PI 39 SCOTS PI 46	SCOTS APSE Covalent		
	Winter Maintenance	RSA CoPWMH	Specified within 'Winter Service for Roads & Footways - Policy & Procedures Document'	SCOTS PI 43 SCOTS PI 50	SCOTS APSE Covalent	There are additional stats within the SCOTS Performance Framework	
	Coordination of Road Works	New Roads & Street Works Act Transport (Scotland) Act	Statutory function outlined within NRWSA Codes of Practice	SRWC KPI's	SRWC CEO	Scottish Road Works Commissioner (SRWC) provides CEO with annual performance report	
	Construction of New Carriageways and Footways	RSA	New development infrastructure constructed in accordance with "Development Roads Guidelines and Specification" through the Roads Construction Consent Process	Difficult to define due to external variables		Service inspection procedures for officers but only key steps currently undertaken due to resourcing issues	
	Emergency Response to Incidents	RSA CoPWMH Civic Contingencies Act	At operational level the council responds to incidents at the request of the emergency services or public within a set timescale.	SCOTS PI 03b SCOTS PI 45	SCOTS APSE Covalent	SCOTS PI's include Cat 1 defects reported by stakeholders. Further investigation required on reporting response to major events.	
	Accident location Investigation	Section 39 Road Traffic Act 1988	Monitor & record injury accident data in accordance with "Scotland's Road Safety Framework 2020"	Covalent RAT 11, 13, 14, 15, 16	Covalent Scot Gov	Information provided for "Reported Road Casualties 2010"	
	Skid Resistance Testing	CoPWMH	<i>The Service plans to develop a Skid resistance Strategy starting end of 2012</i>			Requires further development	
Verge/ Grassed Areas	Cutting frequency	RSA CoPWMH	Will be incorporated into Drainage Lifecycle Plan. (Verges cut twice per annum. Visibility splays cut more frequently if required)	To be developed		Budget held by Land Services Contracts	
Street Lights	Repairs & Defects	RSA CoP Well Lit Highways	Specified within "Street Lighting Policy" document	SCOTS PI 02 SCOTS PI 03 SCOTS PI 35	SCOTS APSE Covalent	There are additional stats within the SCOTS Performance Framework	
	Electrical Testing	RSA CoP Well Lit Highways	Specified within "Street Lighting Policy" document	APSE 38.1	Roads Manager	Inspection regime implemented late 2011/12	
	Structural Testing	RSA CoP Well Lit Highways	Specified within "Street Lighting Policy" document	APSE 38.2	Roads Manager	Inspection regime implemented early 2012/13	

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	Electricity Consumption of Street Lights (and lit signs / bollards)	RSA CoP Well Lit Highways	Specified within "Street Lighting Policy" document	SCOTS PI 18b Covalent RAT08	SCOTS APSE Covalent		
Drainage	Cleansing of Gullies	RSA CoPVMH	Will be incorporated into drainage lifecycle plan. (All gullies are scheduled to be cleaned on a cyclic basis of twice p.a.)	To be developed		Requires amended working practices	
Drainage / Flooding	Watercourse Maintenance	Flood Prevention & Land Drainage (Scotland) Act	Specified within "Flood Prevention and Land Drainage Biennial Report".	To be developed			
Traffic Signals	Repair of Defects	RSA CoPVMH	Specified within "Traffic Signs Maintenance Contract - Consortium SLA". (Siemens)	Covalent RAT 06	Covalent	Used to be SPI but no longer recorded nationally	
Bridges	Principle Inspections	RSA CoP Management of Structures	"Bridge Inspection & Management SLA" - between Clacks & Falkirk Council Also Structures Lifecycle Plan	SCOTS PI 300	SCOTS APSE Covalent		
	Bridge Condition Inspections	RSA CoP Management of Structures	"Bridge Inspection & Management SLA" - between Clacks & Falkirk Council Also Structures Lifecycle Plan	SCOTS PI 301	SCOTS APSE Covalent		
	Bridge Capacity	RSA CoP Management of Structures	"Bridge Inspection & Management SLA" - between Clacks & Falkirk Council Also Structures Lifecycle Plan	SCOTS PI 302 SCOTS PI 303 SCOTS PI 304 SCOTS PI 305	SCOTS APSE Covalent		
Customer Services	Response to correspondence	Customer Service Excellence	Corporate Customer Charter	SCOTS PI 37	SCOTS APSE Covalent	Does not include emails / telephone call responses. Requires procedural changes & / or IDOX reporting.	

## 6. LIFECYCLE PLANNING (LCP)

### 6.1 Purpose of Lifecycle Planning

As part of the development of this Plan we have created lifecycle plans to document how each of the asset groups that make up our road infrastructure is managed. Each lifecycle plan provides definition of the standards that are applied to the management of the asset group in question and details of the processes that are used to ensure that these standards are delivered.

Production and updating of the lifecycle plans is also enabling local knowledge to be captured. Documenting the LCP's allows us to capture the knowledge of individuals, to record this and enable it to be shared and developed.

### 6.2 Output from Lifecycle Planning

The output from the lifecycle planning process is long term prediction of the cost of the continued management and operation of the asset in question. These should be in the form of financial projections and be linked to target levels of service. Financial projections have been partially developed for certain assets (street lighting & traffic signals) but require further work.

### 6.3 Importance of Lifecycle Plans

Lifecycle plans are the core of our approach to road asset management planning. They contain the detail that enables asset management practices, such as long term cost projection, performance management and risk management, to be applied consistently across all asset groups.

### 6.4 Lifecycle Plan Contents

Lifecycle plans are being updated as we gather and analyse information on each asset group. When fully populated each LCP will contain the following information.

Section	Answers	Contains
The asset	What assets do the council own?	<ul style="list-style-type: none"><li>- inventory details (type, size, etc)</li><li>- Asset growth statistics</li></ul>
Service expectations	What each asset group is required to do?	<ul style="list-style-type: none"><li>- Customer expectations</li><li>- Council objectives for transport</li><li>- Specific user requirements</li><li>- Safety considerations</li><li>- 3rd party use</li><li>- Environmental requirements</li><li>- Network availability</li></ul>

## RAMP2

		- Amenity considerations
Management practices	How is this asset group managed?	<ul style="list-style-type: none"> <li>- Policies</li> <li>- Inspection Regime</li> <li>- Condition Assessment</li> <li>- Asset acquisition standards</li> <li>- Routine maintenance standards</li> <li>- Operations / cyclic maintenance</li> <li>- Planned maintenance standards</li> <li>- Disposal standards</li> </ul>
Investment	How much should be and is spent on this asset group?	<ul style="list-style-type: none"> <li>- Historical Investment</li> <li>- Output from historical investment</li> <li>- Forecast financial needs</li> <li>- Valuation : GRC, DRC &amp; ADC</li> </ul>
Works programme	How are works programmed for this asset group?	<ul style="list-style-type: none"> <li>- Existing forward works programme 3yr</li> <li>- Works programme coordination</li> <li>- Option appraisal treatment selection               <ul style="list-style-type: none"> <li>- at a project level</li> <li>- at a budget category level</li> </ul> </li> </ul>
Risk	What are the risks associated with this asset group?	<ul style="list-style-type: none"> <li>- Risk identification</li> <li>- Major risk assessment</li> </ul>
Works & service delivery	How are works delivered or procured on this asset group?	-
Performance measurement	How is the performance of this asset group measured & managed?	<ul style="list-style-type: none"> <li>- Performance indicators</li> <li>- Current performance figures</li> <li>- Target performance figures</li> </ul>
Strategies	What strategies exist for the future management of this asset group?	<ul style="list-style-type: none"> <li>- Street lighting policy</li> <li>- Winter service policy</li> <li>- Safety inspection policy</li> </ul>
Service improvement actions	What changes would improve the council's management of this asset group?	- Asset specific improvement actions

### 6.5 Status of Lifecycle Plans

Separate LCP's have been produced for each of the following asset groups and are currently in the state of development noted. (Percentages obtained using tool provided for SCOTS RAMP project).

## RAMP2

<b>Asset Group</b>	<b>Status</b>	<b>Actions</b>
Carriageways	65%	Identifies need for additional information & changes to current practice
Other Paved Areas	64%	Identifies need for additional information & changes to current practice
Bridges & Structures	68%	Identifies need for additional information & changes to current practice
Street Lighting	70%	Identifies need for additional information & changes to current practice
Drainage		

### 6.6 Asset Group Status Reports (Major Asset Groups)

The current status of the major asset groups that make up the road asset as at September 2012 are summarised in the tables overleaf.

*Please note that the historical financial information included below, has not been adjusted for inflation, which has resulted in significant reductions to the output generated from investment in recent years. Asset growth should also be considered while examining this historical investment.*

# RAMP2

Asset Group: CARRIAGEWAYS Summary Table																																																
Statistics					Commentary																																											
The Asset	<b>Road Class</b>	<b>Urban</b>	<b>Rural</b>	<b>Total</b>	<b>% of Network</b>	<p>The network has grown by 29.6km (11.5%) over the last 13 years.</p> <p>The classified network alone has increased by 4.2km (3.9%) during this period.</p>																																										
	Principle A	20.4	28.9	49.3	17.1																																											
	B	11.6	22.7	34.3	11.9																																											
	C	15.6	12.5	28.1	9.8																																											
	Unclassified	161.4	14.2	175.6	61.2																																											
	Total	205.3	79.3	287.3	100.0																																											
Customer Expectations	<table border="1"> <caption>Customer Expectations Data</caption> <thead> <tr> <th>Category</th> <th>Yes (%)</th> <th>No (%)</th> <th>No Opinion (%)</th> </tr> </thead> <tbody> <tr> <td>Good Road Condition</td> <td>35</td> <td>60</td> <td>5</td> </tr> <tr> <td>Good Winter Maintenance</td> <td>65</td> <td>30</td> <td>5</td> </tr> <tr> <td>Inconvenienced by Roadworks</td> <td>50</td> <td>40</td> <td>10</td> </tr> <tr> <td>Inconvenienced by Public Utilities</td> <td>55</td> <td>35</td> <td>10</td> </tr> <tr> <td>Is Congestion A Major Issue</td> <td>10</td> <td>85</td> <td>5</td> </tr> </tbody> </table>					Category	Yes (%)	No (%)	No Opinion (%)	Good Road Condition	35	60	5	Good Winter Maintenance	65	30	5	Inconvenienced by Roadworks	50	40	10	Inconvenienced by Public Utilities	55	35	10	Is Congestion A Major Issue	10	85	5	<p>There is a relatively high percentage of dissatisfied residents in the majority of categories. The results shown are from the LTS survey in 2006. Further investigation has shown that the questionnaire wording can have a significant effect on the results (see Lifecycle Plan).</p> <p>A more detailed survey is required.</p>																		
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Condition	<p><b>Key - Red:</b> Repairs should be considered  <b>Amber:</b> Further investigation is required  <b>Green:</b> In an acceptable condition</p> <table border="1"> <caption>Condition Data</caption> <thead> <tr> <th>Class</th> <th>Green (%)</th> <th>Amber (%)</th> <th>Red (%)</th> </tr> </thead> <tbody> <tr> <td>A Class</td> <td>75</td> <td>15</td> <td>10</td> </tr> <tr> <td>B Class</td> <td>70</td> <td>20</td> <td>10</td> </tr> <tr> <td>C Class</td> <td>70</td> <td>20</td> <td>10</td> </tr> <tr> <td>Unclassed</td> <td>55</td> <td>35</td> <td>10</td> </tr> <tr> <td>ALL</td> <td>65</td> <td>30</td> <td>5</td> </tr> </tbody> </table>					Class	Green (%)	Amber (%)	Red (%)	A Class	75	15	10	B Class	70	20	10	C Class	70	20	10	Unclassed	55	35	10	ALL	65	30	5	<p>The method of calculating the road condition indicator (from the Scottish Road Maintenance Condition Survey (SRMCS)) has changed a number of times since 2004, making it unrealistic to undertake a comparison of historical results.</p> <p>This data is taken from a sample of the network and factored up.</p>																		
	Class	Green (%)	Amber (%)	Red (%)																																												
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	Year	Planned	Reactive	Routine	Winter	Improvements																																										
2006/07	250	100	200	200	450																																											
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2008/09	150	100	150	250	750																																											
2009/10	450	100	150	300	100																																											
2010/11	700	150	300	400	50																																											
2011/12	1100	50	250	250	0																																											

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Planned Future Investment	<p>While a long term investment strategy for this asset has not yet been developed, a study commissioned by the Society of Chief Officers in Scotland (SCOTS) predicted that an annual maintenance budget of £1.6million (Apr 2010) is required to maintain our network in a steady state condition. The expenditure in 2011/12, on works which added long term value to the network was around £1.2 million. Continuing investment at current levels will see the RCI (the proportion of the network requiring treatment or investigation) increasing to around 40% within 20 years.</p>
Forward Works Programme	<p>A 12 month rolling programme is maintained by the Service. This incorporates resurfacing and overlay schemes. Levels of funding for maintenance works (both planned and reactive) will be as 2011/12 levels.</p> <p>Over the next 3 years there is £3.1 million capital investment planned for improvement and reconstruction works on this asset group.</p> <p>Priorities:-</p> <ol style="list-style-type: none"> <li>1. Treating defects which carry a risk to life and limb</li> <li>2. Repairing areas identified by safety inspections / service request (if appropriate)</li> <li>3. Resurfacing of more heavily trafficked strategic roads highlighted by the SRMCS</li> </ol>
<p><b>Current Issues</b></p>	
<p>The SRMCS indicates that approximately 6.6% (18.7km) of the public roads within Clackmannanshire should be immediately considered for repair. Furthermore another 29.8% (85km) requires further investigation or monitoring.</p> <p>Only 10% of the unclassified network is surveyed each year but the condition of roads in residential areas is attracting increasing concern. Output from the Safety Inspection regime results in significant resources being consumed repairing safety related defects (non-dangerous) on the non-priority network.</p> <p>Over the last few years, resources have been successfully focused on maintaining the condition of the classified network after the damage caused by the severe winters in 2009/10 &amp; 2010/11. However the unclassified network is now showing significant signs of deterioration.</p> <p>Maintenance costs and the network size and complexity (traffic calming, anti skid surfaces, etc) are increasing. Clearly this situation is not sustainable.</p>	

## RAMP2

### Current Strategies

A five year capital programme of resurfacing, surface dressing and improvement works commenced in 2010/11, designed to improve the condition of the carriageway network to the value of the capital allocated by the Council.

The Service is striving to implement a proactive methodology towards road maintenance (e.g. surface dressings, thin surfacing). However the constant erosion of funding levels (particularly in real terms), combined with increased usage and adverse weather (ice, snow & flooding), is hindering this strategy and inducing a more reactive approach.

The Service works with Falkirk & Stirling Councils on procurement and have developed a joint framework contract which ensures that we have access to competitive contractor rates and provides the ability to benchmark our own schedule rates.

Roads Contracts have undertaken a trail of relatively new equipment that thermally repairs potholes in an efficient and sustainable manner. This technique allows quick permanent repairs to be undertaken, reducing the need for temporary patching and reducing the chances of repeat failure (as this method leaves no joints). Currently there is one of these units in full time operation (weather permitting). There is demand for at least one additional unit but staff resource and attendance levels mean this is not feasible at the current time.

*End of Carriageway Asset Summary*

## RAMP2

Asset Group: OTHER PAVED AREAS Summary Table																																	
	Statistics					Commentary																											
	Type		Total	Type	Total																												
The Asset	Footway	Class	Km	Footpath	51km	<p>The footway network has grown by 9% over the last 10 years (around 32.5km).</p> <p>The footpath network has increased by around 5.4% (2.7km) during this period.</p> <p>Note:- These lengths have been estimated but taken from accurate area (polygon) data</p>																											
		A	57.2																														
		B	32.6	Cycleway	18.2km																												
		C	28.7																														
		U	270.5	Car Parks	21,600sqm (16 No.)																												
		Total	389.0																														
Customer Expectations	<table border="1"> <caption>Customer Expectations Data</caption> <thead> <tr> <th>Category</th> <th>Good (%)</th> <th>Adequate (%)</th> <th>Poor (%)</th> </tr> </thead> <tbody> <tr> <td>Footway Condition</td> <td>18</td> <td>52</td> <td>30</td> </tr> <tr> <td>Cyclepath Condition</td> <td>15</td> <td>50</td> <td>35</td> </tr> <tr> <td>Easy to Park</td> <td>50</td> <td>40</td> <td>10</td> </tr> </tbody> </table>			Category	Good (%)	Adequate (%)	Poor (%)	Footway Condition	18	52	30	Cyclepath Condition	15	50	35	Easy to Park	50	40	10	<table border="1"> <caption>Customer Expectations Data</caption> <thead> <tr> <th>Category</th> <th>Yes (%)</th> <th>No (%)</th> <th>No Opinion (%)</th> </tr> </thead> <tbody> <tr> <td>Winter Service Adequate</td> <td>50</td> <td>40</td> <td>10</td> </tr> <tr> <td>Safe Roads</td> <td>50</td> <td>30</td> <td>20</td> </tr> </tbody> </table>		Category	Yes (%)	No (%)	No Opinion (%)	Winter Service Adequate	50	40	10	Safe Roads	50	30	20
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Condition	<p>A full condition survey of the footway / footpath network was undertaken in 2010/11. Results are recorded in appendix e. Undertaking this survey was labour intensive therefore it is likely that such surveys will only be undertaken every 3 or 4 years.</p> <p>The results of the survey showed the following:-</p>																																
	<table border="1"> <thead> <tr> <th>Condition</th> <th>%</th> <th>Area (sqm)</th> </tr> </thead> <tbody> <tr> <td>Acceptable</td> <td>80.00%</td> <td>641,361</td> </tr> <tr> <td>Safe but poor appearance</td> <td>16.83%</td> <td>134,944</td> </tr> <tr> <td>Minor deterioration</td> <td>3.12%</td> <td>24,974</td> </tr> <tr> <td>Major Deterioration</td> <td>0.05%</td> <td>395</td> </tr> </tbody> </table> <p>(Note - these surveys do not take individual safety defects into account, only sections of footway / footpaths)</p> <p>Safety Inspections are carried out on all footways within the County in accordance with the Service's Inspection Policy. In 2011/12 the Service incorporated footpaths into the inspection regime.</p>						Condition	%	Area (sqm)	Acceptable	80.00%	641,361	Safe but poor appearance	16.83%	134,944	Minor deterioration	3.12%	24,974	Major Deterioration	0.05%	395												
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## RAMP2

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Historical Investment</p>	<table border="1"> <caption>Historical Investment Data</caption> <thead> <tr> <th>Year</th> <th>Planned</th> <th>Reactive</th> <th>Routine</th> </tr> </thead> <tbody> <tr> <td>2008/09</td> <td>70</td> <td>20</td> <td>40</td> </tr> <tr> <td>2009/10</td> <td>185</td> <td>30</td> <td>50</td> </tr> <tr> <td>2010/11</td> <td>0</td> <td>20</td> <td>45</td> </tr> <tr> <td>2011/12</td> <td>20</td> <td>5</td> <td>20</td> </tr> </tbody> </table> <p>*A percentage of reactive costs (temporary patching) may be recorded under carriageways due to the methods used to issue works orders and record costs</p>	Year	Planned	Reactive	Routine	2008/09	70	20	40	2009/10	185	30	50	2010/11	0	20	45	2011/12	20	5	20	<p>The majority of the maintenance carried out on this asset group is on footways and to a lesser extent footpaths.</p> <p>There is currently little maintenance undertaken on cycleways.</p> <p>Car parks are not subject to programmed maintenance, minor works are undertaken when required.</p>
Year	Planned	Reactive	Routine																			
2008/09	70	20	40																			
2009/10	185	30	50																			
2010/11	0	20	45																			
2011/12	20	5	20																			
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Planned Future Investment</p>	<p>Budgets for footway / footpath maintenance have been set at around £174k for a number of years. However the majority of these funds were transferred to carriageways due to their rate of deterioration. There is a danger that lack of maintenance will become a significant issue if this practice continues.</p>	<p>A long term investment strategy for this asset has not yet been developed</p>																				
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Forward Works Programme</p>	<p>A 12 month rolling forward works programme is maintained by the Service. The Service has developed a Prioritised List of footways requiring treatment, built on the information obtained from the condition surveys. This List will form the basis of the works programme but will be governed by the budget available.</p> <p>Over the next 3 years there is around £300k capital investment planned for improvement and reconstruction works on this asset group. The majority of recent funds have been used for the creation of new cycle routes (Cambus to Menstrie). Priorities are as follows:-</p> <ol style="list-style-type: none"> <li>1. Treating defects which carry a risk to pedestrians</li> <li>2. Upgrading concrete slabbed footways to blacktop</li> <li>3. Treating routes highlighted within the Prioritised List</li> </ol>																					
<p><b>Current Issues</b></p>																						
<p>Higher car ownership and the resultant lack of available parking in residential area is causing increased occurrences of parking on footways. This significantly reduces the lifespan of the asset. Although illegal, Central Scotland Police have shown no interest in prosecuting to prevent this practice.</p> <p>Some of the older car parks are in need of repair. There is currently no formal inspection regime or works programme for car parks.</p> <p>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.</p>																						

## RAMP2

### **Current Strategies**

A five year capital programme of reconstruction and improvement works commenced 2010/11. Over the first three years of this programme, the majority of these funds have either been transferred to improve the carriageway assets (due to greater need) or used to successfully develop new cycleways. [The cycleway works were grant assisted which required partial funding from the Council].

An annual maintenance regime is undertaken but currently resources are used to ensure priority routes are maintained to a level to ensure basic safety and accessibility. Other routes are treated as and when resources permit or when treatment becomes essential

Where possible, focus is given to upgrading flagged footways to flexible construction to minimise the number of trips on the network.

*End of Other Paved Areas Asset Summary*

# RAMP2

Asset Group: Street Lighting Summary Table							Commentary
Statistics							
The Asset	Column Type	Col Height	No.	Col Type	Col Height	No.	<p>The street lighting network has grown by 11.5% over the last 7 years (1.7% p.a.) There is no available details of asset acquisition before this time.</p> <p>Growth in lit signs and bollards is unknown at present.</p>
	Aluminium	4m	10	Steel	5m	2601	
	Concrete	5m	459		6m	3295	
		8m	6		8m	1781	
	Fibre Glass		29			10m	
	Wood		171				
	<b>TOTAL = 8,616</b>						
Lit Signs			390	Lit Bollards		77	
Customer Expectations	Do You Consider Street Lighting to be in Good Condition			What do you consider the condition of street lighting in Clacks to be			<p>Due to the wording of the questionnaire, there is a significant difference in satisfaction levels between the 2006 and 2009 surveys. It is difficult to determine whether this improvement has any relationship to the Service provided.</p> <p>The requirement for a more detailed survey to be undertaken has been highlighted as a task within this Plan.</p>
	<p><b>2006</b></p> <p>75% Yes, 22% No, 3% No Opinion</p>			<p><b>2009</b></p> <p>54% Good, 36% Adequate, 10% Poor</p>			
Age / Condition	<p>Age Profile of Lighting Columns</p>						<p>The age condition profile is based on partial estimates by column types (80% of the data is thought to be accurate to 2 years). The estimated data is mainly for schemes constructed pre 1975 and replacement schemes carried out pre 1990.</p> <p>The second table shows columns with expired service lives, as forecast by year, assuming continued current expenditure levels. In the medium term the overall condition of the asset should improve.</p>
	<p>Street lighting Columns Exceeding Expected Service Life</p>						

# RAMP2

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Historical Investment</p>	<table border="1"> <caption>Historical Investment Spend (£0,000's)</caption> <thead> <tr> <th>Year</th> <th>Cyclic</th> <th>Reactive</th> <th>Planned</th> <th>Electricity</th> </tr> </thead> <tbody> <tr> <td>2006/07</td> <td>10</td> <td>210</td> <td>330</td> <td>280</td> </tr> <tr> <td>2007/08</td> <td>10</td> <td>200</td> <td>160</td> <td>300</td> </tr> <tr> <td>2008/09</td> <td>10</td> <td>190</td> <td>250</td> <td>300</td> </tr> <tr> <td>2009/10</td> <td>25</td> <td>210</td> <td>350</td> <td>300</td> </tr> <tr> <td>2010/11</td> <td>10</td> <td>170</td> <td>370</td> <td>280</td> </tr> <tr> <td>2011/12</td> <td>45</td> <td>220</td> <td>340</td> <td>310</td> </tr> </tbody> </table>	Year	Cyclic	Reactive	Planned	Electricity	2006/07	10	210	330	280	2007/08	10	200	160	300	2008/09	10	190	250	300	2009/10	25	210	350	300	2010/11	10	170	370	280	2011/12	45	220	340	310	<p>It is widely known that energy costs have spiraled over the last five years and are likely to continue rising in future. This has had a significant effect on the maintenance budget.</p>
Year	Cyclic	Reactive	Planned	Electricity																																	
2006/07	10	210	330	280																																	
2007/08	10	200	160	300																																	
2008/09	10	190	250	300																																	
2009/10	25	210	350	300																																	
2010/11	10	170	370	280																																	
2011/12	45	220	340	310																																	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Planned Future Investment</p>	<p>A five year capital programme of reconstruction and improvement works commenced from 2010/11, designed to improve the condition of the network to the value of the capital allocated by the Council (around 225k per annum).</p>																																				
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Forward Works Programme</p>	<p>A 12 month rolling forward work programme is maintained by the Service. Levels of funding for maintenance works (both planned and reactive) will be as at 2011-12.</p> <p>Priorities are identified within the Street Lighting Policy document.</p>	<p>Lit signs and bollards are replaced on an ad-hoc basis rather than by programmed works.</p>																																			
<p><b>Current Issues</b></p>																																					
<p>A significant level of underfunding over a number of years has caused a backlog of required street lighting replacement works. It is estimated that it would take around £1.4 million to clear this backlog.</p> <p>Spiralling energy costs have eaten into the revenue budget and these costs are predicted to increase at similar rates in the future. Combined with environmental pressure on the Council to reduce it's carbon footprint, this is creating a drive to introduce new technologies. Although these technologies may reduce long term maintenance costs, acquisition costs may prove prohibitive (on a significant scale).</p> <p>Existing light sources are poor in many areas, where lighting levels do not conform with the latest legislation. Replacement schemes often result in an additional number of columns being required to allow standards to be met.</p> <p>On average there are around 1850 faults reported / found per year, with electrical faults varying from 2 to 30 per year.</p> <p>There has been one instance within the last 3 years where a concrete column collapsed (no one was hurt). To minimise the risk of similar incidents in future, the Service has implemented formal inspection procedures for both structural and electrical testing.</p> <p>There are thought to be around 1900 units which have now exceeded their service lives.</p>																																					

## RAMP2

### Current Strategies

Roads & Transportation have developed a management policy for this asset. The latest version is detailed in Appendix J (the first version was approved by Committee in November 2010).

A maintenance regime is undertaken annually with an investment of around £400k planned for 2010/11 (including Capital funds). The Council is well underway with a replacement programme of the old, damaged and poor quality concrete units (particularly 8 metre columns). Routine maintenance and repair work will continue to be a high priority for the Council.

The Council will also consider the improvement of street lighting in conjunction with new traffic management schemes. Lanterns will be replaced with 'white light' type units (Cosmo's) as and when they reach the end of their lifespan.

The Council completed a two year programme around 2001 / 2002 to replace 800 deteriorating units with 1000 new galvanised steel columns. This was undertaken on a 20 year lease scheme meaning current and future revenue budgets will be reduced by the payback amount of £93,000 p.a.

*End of Street Lighting Asset Summary*

# RAMP2

Asset Group: Structures Summary Table																																							
Statistics							Commentary																																
The Asset	<b>Categorisation by Main Construction Material</b>																																						
	<b>Material/Type</b>	<b>Masonry</b>	<b>Concrete</b>	<b>Metal</b>	<b>Timber</b>	<b>Other</b>	<b>Totals</b>																																
	Bridges	17	19	7	0	0	43																																
	Culverts	27	22	12	0	1	62																																
	Tunnels	1	0	0	0	0	1																																
	Footbridges	1	0	10	1	0	12																																
Retaining Walls	Not presently quantified																																						
	<p>The structures network has grown over many years, there is no growth expected over the life of RAMP2.</p> <p>Included in these listed structures are 9 no. bridges currently jointly maintained between Clacks Council and other organisations.</p> <p>There are a further 54 structures on private roads within the area.</p>																																						
Customer Expectations	No customer surveys have been carried out in relation to the maintenance and management of the structures assets.						The Service is investigating the possibility of initiating a road maintenance focused customer expectation survey.																																
Condition	Inspections currently being carried out by Falkirk Council in accordance with the SLA. The inspection data has not yet been entered into the SMS therefore condition info is not currently available.						See milestones																																
Historical Investment	<table border="1"> <caption>Historical Investment Data (Estimated)</caption> <thead> <tr> <th>Year</th> <th>Revenue</th> <th>Capital</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>2005/06</td> <td>50,000</td> <td>100,000</td> <td>150,000</td> </tr> <tr> <td>2006/07</td> <td>80,000</td> <td>530,000</td> <td>610,000</td> </tr> <tr> <td>2007/08</td> <td>50,000</td> <td>460,000</td> <td>510,000</td> </tr> <tr> <td>2008/09</td> <td>30,000</td> <td>120,000</td> <td>150,000</td> </tr> <tr> <td>2009/10</td> <td>10,000</td> <td>10,000</td> <td>20,000</td> </tr> <tr> <td>2010/11</td> <td>20,000</td> <td>10,000</td> <td>30,000</td> </tr> <tr> <td>2011/12</td> <td>50,000</td> <td>10,000</td> <td>60,000</td> </tr> </tbody> </table>						Year	Revenue	Capital	Total	2005/06	50,000	100,000	150,000	2006/07	80,000	530,000	610,000	2007/08	50,000	460,000	510,000	2008/09	30,000	120,000	150,000	2009/10	10,000	10,000	20,000	2010/11	20,000	10,000	30,000	2011/12	50,000	10,000	60,000	<p>Investment spiked between 2006 and 2008. This was due to the replacement of Shavelhaugh Bridge and the implementation of the SAK Railway.</p> <p>The lack of a full time Engineer has impeded spending since then. The SLA now in place with Falkirk Council should enable a new maintenance structure to be developed</p>
Year	Revenue	Capital	Total																																				
2005/06	50,000	100,000	150,000																																				
2006/07	80,000	530,000	610,000																																				
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2010/11	20,000	10,000	30,000																																				
2011/12	50,000	10,000	60,000																																				
Planned Future Investment	<p>The Service has not yet undertaken a long term investment strategy for these assets.</p> <p>Annual depreciation for the asset group is estimated at around 255k per annum. Spending over the last 4 years has been at significantly lower levels. However over the last 7 years funding levels have averaged at around 86% of annual depreciation.</p> <p>Levels of funding for maintenance works (reactive) will be as at 2011-12 levels. Over the next 3 years there is an average of around £50k per year capital investment planned for improvement works to the integrity of the structures.</p>																																						

## RAMP2

Forward Works Programme	<p>The Bridges Engineer maintained a list of works required to be undertaken, as identified from the inspection programme. Currently there is one high and one medium priority list of required works. The total value of these works was estimated at around £250k (in 2009/10).</p> <p>Priority:-</p> <ol style="list-style-type: none"><li>1. Ensuring bridges on the strategic road network are capable of carrying the necessary vehicle loading.</li><li>2. Carry out any essential repairs identified by the inspection regime undertaken by Falkirk through the SLA.</li></ol>
<b>Current Issues</b>	
<p>The Council does not have a Bridge Engineer nor a dedicated Inspector. The Service has entered into a contractual agreement with Falkirk Council, who will assist in ensuring that the bridge stock is maintained safely and effectively.</p> <p>Due to these previous resourcing issues, the Service is behind with it's bridge assessment programme. This is a particular issue with Principle Inspections where very few have been carried out within the last five years.</p> <p>A reduction in spending on general structural maintenance over the last few years has resulted in an accumulation of outstanding works. Although most of this work could be considered relatively minor, it is essential that it is carried out to maintain the integrity of the structures and avoid spiralling maintenance costs over the medium term.</p>	
<b>Current Strategies</b>	
<p>A five year capital programme of structural maintenance commenced in 2010 / 11. This programme is focused on eradicating the outstanding structural improvements required on the Service's bridges and culverts.</p> <p>The Service has implement a regime of General Inspections in accordance with the Management of Highway Structures Code of Practice. These inspections will allow the Council to undertake a benchmarking exercise with all Scottish Council's, currently through the SCOTS / APSE PI process, using Bridge Condition Indices (BCI).</p>	

*End of Structures Asset Summary*

## **RAMP2**

### **7. FINANCIAL SUMMARY**

#### **7.1 Sources of Funding & Budget Allocation**

##### **7.1.1 Revenue**

Revenue funding is allocated by the Council based on a resource allocation model using historical precedence but adjusted for specific council priorities. Year on year reductions for efficiency savings are applied, but no allowance is provided for inflation or asset growth.

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

Revenue funds cyclic, routine and some planned maintenance including winter maintenance, major and minor road patching, routine drainage, street lighting repairs, electricity costs, all inspections and staff time.

##### **7.1.2 Capital**

Capital investment provided as a block sum from central government is allocated by the Capital Project Group (CPG) within the Council. A number of block headings for asset improvement have been established.

An additional capital sum is set aside by the CPG for scheme specific funding, which is allocated following an annual bidding process for works five years hence.

Additional capital monies may be made available for specific projects through the use of Prudential Borrowing where a business case must first be made to the CPG. These business cases must show that the benefit obtainable for the level of investment is acceptable, and that the repayments from such borrowing can be made from existing revenue funding. Recently this has been used to gain additional funding for both Carriageway and Street Lighting assets.

In recent years there has been a significant increase in the amount of asset management type works funded from capital as revenue budgets have decreased (particularly in real terms). As a result there is limited funding for improvement or new works.

##### **7.1.3 Income**

There are a few sources of income generated by the Service at present, such as inspection fees relating to granted permits and the New Roads & Street Works Act. However this income is not guaranteed. Any such income is fed back into the maintenance regime.

## RAMP2

The Service is investigating methods of generating further income, such as introducing or increasing fee's for granting of permissions, organising road closures and possibly issuing fixed penalty notices on Statutory Undertakers failing to work in accordance with the NRSWA.

### **2011/12 Roads Budgets by Capital and Revenue**

Current Roads Budget	Total £	Revenue £	Capital £
Carriageways	£2,070,200	£1,140,600	£929,600
Footways & Cycle Tracks	£737,600	£210,100	£527,500
Structures	£72,700	£72,700	
Highway Lighting	£914,400	£681,400	£233,000
Street Furniture	£240,300	£67,500	£172,800
Traffic Management Systems	£134,100	£10,100	£124,000
Land	na	na	na
Operating Costs	£751,400	£751,400	
Overheads	£754,600	£754,600	
<b>Total</b>	<b>£5,675,300</b>	<b>£3,688,400</b>	<b>£1,986,900</b>

#### **7.1.4 Grants**

Individual grants may be available for specific types of improvement work usually from Government (via Regional Transport Partnerships) or specialist interest groups (such as Sustrans). Applications for this grant money are produced by budget holders with any funding allocated being used for the specific projects identified.

The process of applying for such funding has recently become far more onerous, the internal paperwork required to make these applications is likely to reduce the number of bids and hence the available income.

#### **7.2 Historical Expenditure**

General figures for historical expenditure have been provided earlier in the Lifecycle Plan section. Detailed expenditure for 2011/12 is shown in the table below.

**Actual Roads Expenditure by Asset and Cost Category for last completed financial year (2011/12)**

**(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	£2,072,500	£76,200	£1,119,100	£105,100	£85,500	£327,100	£5,000	£302,000		£2,300	£50,200
Footways & Cycle Tracks	£737,600	£0	£20,000	£0	£2,600	£23,100	£0	£164,400		£0	£527,500
Structures	£72,700	£0	£0		£2,300	£7,900	£15,000	£0		£0	£47,500
Highway Lighting	£914,400	£0	£12,800	£0	£10,000	£206,900	£40,800	£410,900		£0	£233,000
Street Furniture	£240,300	£0	£13,000	£0	£0	£50,000	£0	£4,500		£0	£172,800
Traffic Management Systems	£134,100	£0	£10,100	£0	£0	£0	£0	£0		£0	£124,000
Land	na	na	na	na	na	na	na	na	na	na	na
Employee Costs	£751,400							£751,400		£0	
Overheads	£754,600								£754,600	£0	
<b>Total</b>	<b>£5,677,600</b>	£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.

### 7.3 Future Funding Requirements

One of the objectives of asset management is to develop lifecycle costs for all assets, which will assist in predicting long term funding requirements. Full lifecycle costing has not yet been developed, although for assets such as Street Lighting and Traffic Signals initial long term funding projections have been undertaken (see Appendix g).

Similar procedures will be taken for other asset groups as the process progresses, as these projections allow management to view the peaks and troughs of funding requirements for groups of assets.

As highlighted earlier, the estimated investment on maintenance to maintain a steady state condition on the carriageway network alone is £1.6 million. The lifecycle plan summary tables show that just under £1.1m was invested in 2011/12 on planned carriageway maintenance (excluding drainage). However an additional £300k was spent on routine and reactive repairs on the network, predominately due to the adverse weather conditions experienced. The challenge for the Service is to reduce the costs of reactive & routine works by focusing our funds in the most effective manner, thereby maximising the overall level of service that is provided.

### 7.4 Asset Valuation

The current value of our assets (calculated in accordance with CIPFA guidance for Whole of Government Accounting) is as follows:-

Highway Asset Types: (Level 1 categories defined in Table 4.1 "Classification of highway assets", para 4.2.3, pgs 24 to 26, of the transport Code)	Gross Replacement Cost (GRC) estimate	Depreciation	DRC estimate
	£'000	£'000	£'000
Carriageway	348,751	- 37,126	311,625
Footways + cycletracks	54,558	- 9,793	44,765
Structures <sup>1</sup>	66,295	- 3,901	62,394
Lighting <sup>1</sup>	26,889	- 11,554	15,335
Traffic management <sup>1</sup>	588	- 127	461
Street furniture <sup>1</sup>	2,407	- 1,175	1,232
<b>Total</b>	<b>499,489</b>	<b>- 63,676</b>	<b>435,813</b>

These figures will continue to be refined each year as inventory and condition data is improved.

## RAMP2

### 8. RISK MANAGEMENT

The purpose of risk management is to maximise the areas where we have some control over outcome while minimising the areas where we have absolutely no control over the outcome. The management of risk in road maintenance is a continuous process undertaken against a clear and comprehensive understanding and assessment of the risks and consequences involved.

#### 8.1 Corporate Risk Management

The Council's Strategy for Risk Management commits us to the 'intelligent management of risk'. That means trying to understand the likelihood and impact of future events, be they favourable or unfavourable, in order to maximise future performance. Risk management is about understanding the things that could help or hinder us in trying to deliver our objectives.

The Council has agreed criteria by which to judge the likelihood and impact of risks, effectiveness of control measures and required levels of management of residual risks

#### 8.2 Risk Identification

Risks associated with roads are currently identified by various means or activities such as inspection, customer notification, condition assessment surveys, management review of performance and staff notification.

Risks identified by the Service Management have been grouped into common themes and developed into a risk that expresses how the issue could impact on the achievement of the Council's objectives. A risk identification exercise has been undertaken and the risk register is listed in Appendix h.

Risk to the Council's business can take a variety of forms; for example, financial risk, risks to project and service delivery, its reputation, partnerships, employees and Councillors and risks from missed opportunities. Those risks could affect the council's performance, its assets, stakeholders, customers or members of the public. They can also affect the Council's viability.

To attempt to ensure all forms of risks are included within the management process, risks are categorised as follows:

- ◆ Physical
- ◆ Governance
- ◆ Financial
- ◆ Staffing
- ◆ Legislative
- ◆ Network Availability
- ◆ Political
- ◆ Environmental
- ◆ Information / Technology / Communications

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### 8.3 Risk Evaluation

After identification, the next step is to assess those risks in terms of the likelihood that they will occur and the impact if they do. The criteria for the levels of likelihood and impact for risks are shown below.

**Figure 8.3(i) - Risk Likelihood Template**

<b>1. Unlikely</b>
In the opinion of the assessors this is unlikely to ever happen
<b>2. Possible</b>
Although possible, has not happened so far and is unlikely to happen in the future
<b>3. Quite Possible</b>
Has happened in other organisations and could happen here
<b>4. Likely</b>
Has happened in the past, and can be expected to happen sometime in the future
<b>5. Very Likely</b>
Has happened in the last year and can be expected to happen again

Multiplying the likelihood score by the impact score gives the uncontrolled risk score. The next stage identifies controls (strategy, policies, practices that exist currently) and their efficacy (ineffective, partially effective, effective, and very effective).

**Figure 8.3(ii) - Risk Impact Template**

<p>Defining Impact – Financial</p> <ol style="list-style-type: none"> <li>1. Not material : less than £10k</li> <li>2. Material: £10k - £100k</li> <li>3. Serious: £100k - £500k</li> <li>4. Very Serious: £500k - £2m</li> <li>5. Catastrophic: over £2m</li> </ol>
<p>Defining Impact – Reputational</p> <ol style="list-style-type: none"> <li>1. Not material: Managed incident, no customer impact</li> <li>2. Material: Managed incident, no customer impact but in public domain</li> <li>3. Serious: Local media interest, customer complaint</li> <li>4. Very Serious: National media interest, serious loss of confidence</li> <li>5. Catastrophic: Major national media interest</li> </ol>

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<p>Defining Impact – harm</p> <ol style="list-style-type: none"> <li>1. Not material: Unlikely to cause injury</li> <li>2. Material: could result in some form of injury</li> <li>3. Serious: could result in serious injury</li> <li>4. Very Serious: Death</li> <li>5. Catastrophic: multiple deaths</li> </ol>
<p>Defining Impact – disturbance</p> <ol style="list-style-type: none"> <li>1. Not material: no disruption to service</li> <li>2. Material: minor disruption to service</li> <li>3. Serious: serious disruption , some loss of service</li> <li>4. Very Serious: major disruption and loss of service</li> <li>5. Catastrophic: extended loss of service</li> </ol>

The risk is then re-assessed for likelihood and impact. The new score is the current risk score that which exists after controls have been applied and so the real level of risk. That information is then recorded in the risk register. The risks are then plotted on a risk prioritisation matrix to show the level of the risks and enable decisions to be made about the significance of those risks to the Council, and how they will be managed.

**Figure 8.3(iii) - The Risk Matrix**

5. Very Likely	Low	Medium	Medium	High	High
4. Likely	Low	Low	Medium	High	High
3. Quite Possible	Low	Low	Medium	Medium	Medium
2. Possible	Low	Low	Low	Low	Medium
1. Unlikely	Low	Low	Low	Low	Low
	1. Not Material	2. Material	3. Serious	4. Very Serious	5. Catastrophic

### 8.4 Risk Control

Once the risks and opportunities are identified and assessed for likelihood and impact, there needs to be agreement on who is responsible for owning the risk and how the risk will be managed, controlled or exploited.

## **RAMP2**

There are four common approaches to managing a risk; tolerating, treating, terminating and transferring. It should be noted that there may be some risk (even high risks) where the risk cannot be mitigated cost effectively. These risks should continue to be monitored and contingency plans developed in the event of the risk occurring.

Once the existing controls and action plans have been identified, the risks are re-assessed for likelihood and impact. This gives a forecasted controlled score of the Risk Profile as a result of the mitigation action plans. That information is then recorded in the risk register.

### **8.5 Review & Reporting**

This Service risk register will be reviewed annually, although those risks posing a greater threat may require more regular attention on an ad-hoc basis. Those risks which cannot be mitigated effectively at a Service Level, will be reported upwards within the internal management reporting structure.

The risk management framework is a continuous cycle designed not only to identify, assess, manage and review risks, but also to support the service business objectives. Reviewing the risk identification process when drawing up the annual business plan enables the risks and opportunities to be linked directly to the business objectives. That way, risks and opportunities are directly linked to the achievement of business objectives which can then be prioritised using that information.

### **8.6 Risk Register**

Risks relating to the road assets have been recorded on a combined asset based risk register (Appendix h). The Service also maintains a risk register dealing with more strategic events. Any risks appearing on the asset risk register which cannot be mitigated, will be reported to senior management, with a view to the risk being elevated to the Service risk register. Using this method, the existence of the more significant risks can be promoted.

### **8.7 Major Asset Risks**

The major risks identified with each individual asset group tend to be generic to all assets. The risks to asset causing the greatest concern at present are:-

- Increase in network liabilities
- Service is being forced into becoming more reactive and less proactive
- Impacts of adverse / more extreme weather
- Failure of the construction or sever loss of skid resistance on the carriageways

These risks and others identified, are described more fully in Appendix h.

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### 9. IMPROVEMENT PLAN

#### 9.1 Milestones

An improvement action plan has been created to support this plan and is included in Section 9.3 below. For the duration of RAMP2, the key milestones are as follows:-

Task Ref	Milestone	Target Date
C2.1.1 F1.3.1 S1.3.1 L2.3.1	Further develop asset information strategy. 100% of information to be captured for c/w, f/w, f/p and s/l. Then progress to other core data.	Sept 2013 (for 2nd phase)
C3.1.2 F3.4.1 L3.1.2	Improve working practices and reporting methods (with regards to repairs) to ensure systems have data which will be required for providing SCOTS / APSE performance data	April 2013
S2.2.1	Develop systems to allow progression of Structures SLA with Falkirk. Ensuring Falkirk have access to SMS in order that data and condition information is available to both parties.	April 2013
C3.9.1 C4.5.1 F8.1.1 L3.9.1	Develop levels of service and whole life costing in accordance with SCOTS project (option 5 of the National Road Maintenance Review)	Sept 2013
SCOTS	Redevelop structure of RAMP in accordance with latest SCOTS guidance. Including implementation of option appraisal and reporting for each asset class. (Next version)	Nov 2013

#### 9.2 Progress Reporting

Resources will be required to undertake these tasks. A review of progress should be undertaken every quarter with an estimate of the percentage completion of each milestone. Progress will be reported to the Roads & Transportation Manager on a biannual basis.

Improvement actions shown to be falling behind their intended progress should be investigated. The Manager should then make a decision as to whether additional resources or other actions are required in order to rectify the situation. The

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implementation of the asset management project is dependent on these key milestones being reached.

An annual progress report should be submitted to the Council via the Corporate Asset Management Team.

### 9.3 Improvement Actions

The improvement tasks outlined within RAMP1 are detailed in the table below along with the progress to date. Target dates have been amended for actions still outstanding. The priority of the majority of the outstanding actions has changed to follow the direction of the SCOTS Steering Group. A full list of actions required to be undertaken is shown in Appendix i4.

Task Ref	Asset Group	Identification / Description	Improvement Action	By Who	Target Date (Priority)	Results
C2.1.1 F1.3.1 S1.3.1 L2.3.1	c/w f/w sl str	DATA	Develop an asset information strategy to determine the info required to be held, the info currently held, where and in what format, validation checks, the missing info, the collection methods for the missing info and any proposed changes to the storage method. Prioritise condition information.	Various	Apr 2013	Good progress in key areas. Some work still required on smaller asset groups
C2.3.2 F2.2.1	c/w f/w	DATA	Link Hierarchies into RoadNet and WDM applications once FVGIS development work complete	Scott Walker	Outwith control	RoadNet completed June 2010 - awaiting national developments prior to moving any further
C2.4.1 F2.3.2 L2.3.3 S2.3.2	All	DATA	Develop & implement formal data management procedures to ensure updating of the asset register and notification of changes to appropriate parties	Scott Walker / Bridges Engineer	Apr 2013	Procedural checklist introduced for c/w, f/w, f/p. Process maps available for traffic calming
C3.1.2 C4.10.1 F1.4.1	cw fw	DATA	Change method used to record works against codes for improved reporting. Implement new codes and formats into MISC / RMS	Scott Walker / Alex Hood	April 2010	Processes developed in MISC & implemented

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L2.3.4	sl	DATA	Continue progress with digitising underground info - attempt to increase speed of project	Alex Hood / Andrew Walton	Unachievable in short to medium term	Menstrie substantially complete but no resources for other areas
C3.1.1 F3.1.1 L3.1.1	c/w f/w sl	LoS	Implement customer satisfaction survey utilising Clacks 1000 survey panel to assist in setting LOS	Mac West / Scott Walker	Sept 2013 (may not use Clacks 1000)	Awaiting Option 29 of the National Roads Maint Review
C4.5.1 C8.1.1 F8.1.1 L8.1.1 S9.1.1	c/w f/w sl str	LoS	Develop suite of internal PI's & targets to assist in assuring LoS delivery & methodology for recording and producing PI's (including for defect repairs)	Charles Norman / Scott Walker	Oct 2012	Included in RAMP 2 but also working with SCOTS RAMP (Option 5 of the NRMR)
C4.1.1 F4.1.1 L4.1.1 S4.1.1	c/w f/w sl str	POLICY	Develop formal policies for all assets including current procedures adopted by Service. Ensure these are formally approved by Council	Scott Walker	April 2013	Street Lighting Policy to Council (Nov 10) with RAMP. All policies may not be passed to Council
C4.4.1 L4.4.1	c/w sl	POLICY	Liaise with Development Services to adopt formal Council procedures for adopting development & internal works - ensure there is a formal handover procedure and process maps	Scott Walker / Stuart Cullen / Ninian Sommerville	April 2013	Current economic climate means priority for this has dropped
L1.3.1	sl	POLICY	Instigate and formalise both structural and electrical maintenance testing & inspection regimes	Charlie Norman / Robert Auchinvole	Sept 2010	Contract issued for Structural / Electrical testing regime 2012
L4.5.1	sl	POLICY	Set formal emergency reaction times and introduce monitoring process	Scott Walker / Robert Auchinvole	Sept 2010	Included in latest Street Lighting Policy document

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S3.4.1	str	POLICY	Formalise inspections policy on structures assets	Charlie Norman / Bridges Engineer	Sept 2010	Contractual Agreement with Falkirk Council to carry out Inspections (Oct 2011)
C3.9.1 F3.9.1 L3.9.1	c/w f/w s/l	RAM	Build in procedures and method for whole life costing for schemes developed outwith R&T (particularly those using higher quality materials)	Scott Walker	Sept 2011	Awaiting guidance from SCOTS
C4.12.1 S5.3.1 L5.1.1	c/w str s/l	RAM	Develop documented process and method for establishing projected budgetary needs -avoiding using historic allocation	Scott Walker / Charlie Norman / Mac West	Dec 2010	Working in accordance with SCOTS Project
C4.13.1 S5.4.1	c/w str	RAM	Continue working towards producing asset valuations in accordance with SCOTS guidance	Scott Walker	Sept 2010	WGA figures supplied June 2011
C4.7.1 F4.7.2 L4.7.2 S4.7.1	c/w f/w s/l str	RAM	Develop long term programmes and formal scheme prioritisation process by developing lifecycle analysis for all maintenance activities - moving away from prioritising using institutional knowledge. Develop formal monitoring regime for all works	Scott Walker / Area Officers / Charlie Norman / Bridge Engineer / Robert Auchinvole	March 2011	Awaiting guidance from SCOTS (Option 5 NRMR)
C5.2.1 S6.2.1	c/w str	RAM	Development of more cross-asset hybrid schemes through lifecycle planning and extended works programme periods.	Charlie Norman / Scott Walker	March 2011 (ongoing with development of RAMP)	Carried out to a degree (footway / lighting improvements, also traffic calming / resurfacing)
C5.3.1 F5.3.1 L5.3.1 S6.3.1	c/w f/w sl str	RAM	Develop a formal process to consider how options are identified and appraised when prioritising works	Charlie Norman / Scott Walker	March 2011	Informal processes for Street Lighting, fw's and c/w's to an extent (SRMCS).

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C3.1.2 F3.1.2 L3.1.2	c/w f/w sl	WORKFLOW	Improve reporting from RMS to produce PI's for defect repairs. Will require changes to way staff operate. Officers required to record actual works dates and types on RMS. (eg recording numbers and response times for priority defects)	Scott Walker / Roads Officers	July 2010	Procedures in place from June 2010. Have had difficulties due to adverse weather (focusing on CAT 1's)
C3.5.1 F3.5.1	c/w	WORKFLOW	Inform all officers of their noticing obligations under the NRSWA & T(S)A and ensure compliance by implementing a performance measure. Develop improvement plan to assist performance in meeting targets set by SRWC	Scott Walker	April 2010	Presentations given to all appropriate staff in April 2010. Monitoring ongoing.
C4.2.1 F1.3.2	c/w f/w	WORKFLOW	Ensure safety inspections are undertaken on all assets, timescales maintained and records kept for all safety related repairs and produce PI's	Scott Walker / Area Officers	Sept 2010	S/l, C/w, F/w, F/p, drainage and structural testing all underway
C4.3.2	c/w	WORKFLOW	Incorporate method for Officers to record condition data during course of daily duties	Scott Walker	Sept 2010	One Officer tasked with carrying out all condition surveys (footpaths & footways only). SRMCS seen as sufficient c/w monitor
L7.1.2	sl	WORKFLOW	Reintroduce annual tender process to ensure competitive pricing for materials	Gary Fraser / Robert Auchinvole	April 2010	Street Lighting annual tender issued & returned May 10

*The data improvement spreadsheet referred to in the first task above can be found in Appendix i4.*

## 10. MANAGEMENT & CONTROL OF THE PLAN

### 10.1 Introduction

Throughout this RAMP, issues and corresponding improvement actions have been established. These actions will need to be prioritised, programmed, resourced, and implemented in order for an asset management approach to be fully introduced.

### 10.2 Ownership of the RAMP

RAMP2 will become a controlled document with named officers responsible for:-

- distribution to appropriate staff, members and the public
- monitoring of improvement actions and the implementation Plan
- authorising and actioning updates to the Plan

The persons charged with the delivery of this Road Asset Management Plan and their roles within the process are detailed below.

Position	Name	Role
Elected Members - Corporate Asset Management Team - Chief Executive - Council		Approval of the RAMP (3 yearly)
Director of Services to Communities	Garry Dallas	Approval of the RAMP (annually)
Head of Community & Regulatory Services	John Gillespie	
Roads & Transportation Manager	Mac West	Champion of the RAMP within the Service  Provides a link to corporate strategies and identifies where improvements to the Service can be made under the continuous improvement agenda
Roads & Transportation Team Leaders	Charles Norman & Alan Murray	Day to day implementation of RAMP, monitoring improvement actions, informed decision making & ensuring updates to the documents  Producing integrated works programmes, both long and short term, and ensuring their availability to all interested parties.  Identifying and actioning policy updates

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Asset Management Officer	Scott Walker	<p>Updating lifecycle plans, ensuring implementation of improvement actions. Identifying asset specific investment requirements and changes to procedures and documentation.</p> <p>Ensuring data management procedures are followed and that all information is kept up to date. Collecting and interpreting performance measures and providing requested information requests to other parties</p> <p>Monitoring and updating risk registers, ensuring controlling methods are put in place &amp; identifying risks that need to be passed up the management tree.</p>
Network Officer	Alex Hood	Development of data management systems for all assets & ensuring their integration.

### 10.3 Updating the RAMP

It is anticipated that the review and updating cycles for each part of the Plan will differ as follows:

The Executive Summary: is expected to be replaced after this year by an annual asset management plan performance report. This report will update the key actions from the Plan and present these into relevant Service decision making processes in an attempt to influence budget allocations.

The Asset Management Plan: it is expected that the Plan will be updated annually during the implementation phase (1-3 years), as it is expected that the information contained within it will change considerably as systems and methods are developed. The structure will change substantially from next year in accordance with SCOTS guidance, where the main RAMP document will become more focused and succinct.

The Appendices: will be 'living' documents. They will be updated as their contents demand them to be changed. Updating will be linked to the management processes introduced to manage the implementation of the Plan. The lifecycle plans will be incorporated into a 'Road Maintenance Manual' from 2013. This will contain information on the systems and methods used to manage the roads assets.

The Implementation Plan: it is anticipated that the implementation plan will have a duration that mirrors the Plan, i.e. it will contain proposals that will target the embedding of a road asset management practice within Clackmannanshire Council's Roads & Transportation Section.